REQUEST FOR REDESIGNATION AND MAINTENANCE PLAN FOR OZONE ATTAINMENT IN THE 8-HOUR OZONE NONATTAINMENT AREA

Lake and Porter Counties, Indiana

Developed By:
The Indiana Department of Environmental Management

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LAKE AND PORTER COUNTIES, INDIANA

1.0 INTRODUCTION

This document supports Indiana's request that Lake and Porter Counties, in Northwest Indiana, be redesignated from nonattainment to attainment of the 8-hour ozone standard. These counties have recorded three (3) years of complete, quality assured ambient air quality monitoring data for the years 2003 – 2005 demonstrating attainment with the 8-hour ozone standard. The counties also recorded three (3) years of complete; quality assured ambient air quality monitoring data for the years 2002 – 2004 that demonstrated attainment with the standard. Additionally, the remaining portion of the Chicago-Gary-Lake County, IL-IN nonattainment area has also recorded three (3) years of complete, quality assured ambient air quality monitoring data for the years 2003 – 2005 demonstrating attainment with the 8-hour ozone standard.

Indiana's request is based on Section 107 (d)(3) of the Clean Air Act (CAA), which states:

> (D) The Governor of any State may, on the Governor's own motion, submit to the Administrator a revised designation of any area or portion thereof within the State. Within 18 months of receipt of a complete State redesignation submittal, the Administrator shall approve or deny such redesignation. The submission of a redesignation by a Governor shall not affect the effectiveness or enforceability of the applicable implementation plan for the State.

Section 107 (d)(3)E of the CAA establishes specific requirements to be met in order for an area (or portion of an area) to be considered for redesignation including:

> (E) The Administrator may not promulgate a redesignation of a nonattainment area (or portion thereof) to attainment unless--
>
> (i) the Administrator determines that the area has attained the national ambient air quality standard;
> (ii) the Administrator has fully approved the applicable implementation plan for the area under section 110(k);
> (iii) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and applicable Federal air pollutant control regulations and other permanent and enforceable reductions;

(iv) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and

(v) the State containing such area has met all requirements applicable to the area under section 110 and part D.

This document addresses each of these requirements, and provides additional information to support continued compliance with the 8-hour ozone standard.

1.1 Background

The Clean Air Act Amendments of 1990 (CAAA) required areas designated nonattainment for the National Ambient Air Quality Standard (NAAQS) for ozone to develop SIPs to expeditiously attain and maintain the standard. In 1997, the United States Environmental Protection Agency (U.S. EPA) revised the air quality standards for ozone replacing the 1979 one-hour standard with an 8-hour ozone standard set at 0.08 parts per million (ppm). The standard was challenged legally and upheld by the U.S. Supreme Court in February of 2001. The U.S. EPA designated areas under the 8-hour ozone standard on April 15, 2004 as attainment, nonattainment, or unclassifiable.

If a nonattainment area is classified as "serious", "severe", or "extreme", the CAAA mandates that the presumptive nonattainment boundary include the entire Consolidated Metropolitan Statistical Area (CMSA), or Metropolitan Statistical Area (MSA) and all of its Metropolitan Divisions. The U.S. EPA designated Lake and Porter counties nonattainment as a portion of the Chicago-Gary-Lake County, IL-IN nonattainment area (40 CFR 81.315), but classified them as "moderate" under Subpart 2 of Part D of the CAA. The Lake County-Kenosha County, Illinois-Wisconsin Metropolitan Division of the Chicago MSA was not included as part of the Chicago-Gary-Lake County, IL-IN nonattainment area. Therefore, U.S. EPA's designation of Lake and Porter counties, Indiana as part of the Chicago nonattainment area, and exclusion of other portions of the Chicago MSA like Kenosha County, Wisconsin, was discretionary rather than mandatory under the CAAA.

The specific counties and partial counties that comprise the nonattainment as defined in Sections 81.314 and 81.315 include Cook, DuPage, Grundy (partial), Kane, Kendall (partial), Lake, McHenry, and Will counties, Illinois, and Lake and Porter counties, Indiana. This designation subjected the area to the new 8-hour ozone requirements, including development of a plan to reduce volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) emissions and a demonstration that the area will meet the federal 8-hour air quality standard for ozone by June 15, 2010.

1.2 Geographical Description of Indiana's Portion of Nonattainment Area

Lake and Porter counties are located in Northwest Indiana and contain such cities as Gary, Hammond, East Chicago, Portage, and Valparaiso. Lake and Porter counties are bordered by Lake Michigan to the north, Indiana counties of Newton and Jasper to the

south, and LaPorte to the east. The Illinois counties of Cook, Kankakee, and Will border Lake and Porter counties to the west. This area is depicted in Figure 3.1.

1.3 Status of Air Quality

Ozone monitoring data for the most recent three (3) years, 2003 through 2005 demonstrates that air quality has met the NAAQS for ozone throughout the nonattainment area. Lake and Porter counties also recorded three (3) years of complete; quality assured ambient air quality monitoring data for the years 2002 – 2004 that demonstrated attainment with the standard. This fact, accompanied by the permanent and enforceable decreases in emission levels discussed in Section 4.0, justifies a redesignation to attainment for Indiana's portion of the nonattainment area based on Section 107(d)(3)(E) of the CAAA.

2.0 REQUIREMENTS FOR REDESIGNATION

2.1 General

Section 110 and Part D of the CAAA lists a number of requirements that must be met by nonattainment areas prior to consideration for redesignation to attainment. In addition, U.S. EPA has published detailed guidance in a document entitled *Procedures for Processing Requests to Redesignate Areas to Attainment*, issued September 4, 1992, to Regional Air Directors. This document is hereafter referred to as "Redesignation Guidance". This Request for Redesignation and Maintenance Plan is based on the Redesignation Guidance, supplemented with additional guidance received from staff of the Regulation Development Section of U.S. EPA Region V.

2.2 Ozone Monitoring 107(d)(3)(E)(i)

1) A demonstration that the NAAQS for ozone, as published in 40 CFR 50.4, has been attained. Ozone monitoring data must show that violations of the ambient standard are no longer occurring.

2) Ambient monitoring data quality assured in accordance with 40 CFR 58.10, have been recorded in the U.S. EPA Air Quality System (AQS) database, and available for public view.

3) A showing that the three-year average of the fourth highest values, based on data from all monitoring sites in the area or its affected downwind environs, are below 85 parts per billion (ppb). This showing must rely on three (3) complete, consecutive calendar years of quality assured data.

4) A commitment that, once redesignated, the State will continue to operate an appropriate monitoring network to verify the maintenance of the attainment status.

2.3 Emission Inventory 107(d)(3)(E)(iii)

1) A comprehensive emission inventory of the precursors of ozone completed for the base year.

2) A projection of the emission inventory to a year at least 10 years following redesignation.

3) A demonstration that the projected level of emissions is sufficient to maintain the ozone standard.

4) A demonstration that improvement in air quality between the year violations occurred and attainment was achieved is based on permanent and enforceable emission reductions and not on temporary adverse economic conditions or unusually favorable meteorology.

5) Provisions for future annual updates of the inventory to enable tracking of the emission levels including an annual emission statement from major sources.

2.4 Modeling Demonstration

While no modeling is required for redesignating ozone nonattainment areas, the Indiana Department of Environmental Management (IDEM) has incorporated photochemical modeling information as part of this document to further support its request for Lake and Porter counties to be redesignated to attainment.

2.5 Controls and Regulations 107(d)(3)(E)(ii) & 107(d)(3)(E)(v)

1) A U.S. EPA approved SIP control strategy that includes Reasonably Available Control Technology (RACT) requirements for existing stationary sources covered by Control Technology Guidelines (CTG) and non-CTG RACT for all major sources.

2) Evidence that control measures required in past ozone SIP revisions have been fully implemented.

3) Acceptable provisions to provide for new source review.

4) Assurances that existing controls will remain in effect after redesignation, unless the State demonstrates through photochemical modeling that the standard can be maintained without one (1) or more controls.

5) If appropriate, a commitment to adopt a requirement that all transportation plans conform with and are consistent with the SIP.

2.6 Corrective Actions for Potential Future Violations of the Standard

1) A commitment to submit a revised plan eight (8) years after redesignation.

2) A commitment to expeditiously enact and implement additional contingency control measures in response to exceeding specified predetermined levels (triggers) or in the event that future violations of the ambient standards occur.

3) A list of potential contingency measures that would be implemented in such an event.

4) A list of VOC and NO_x sources potentially subject to future controls.

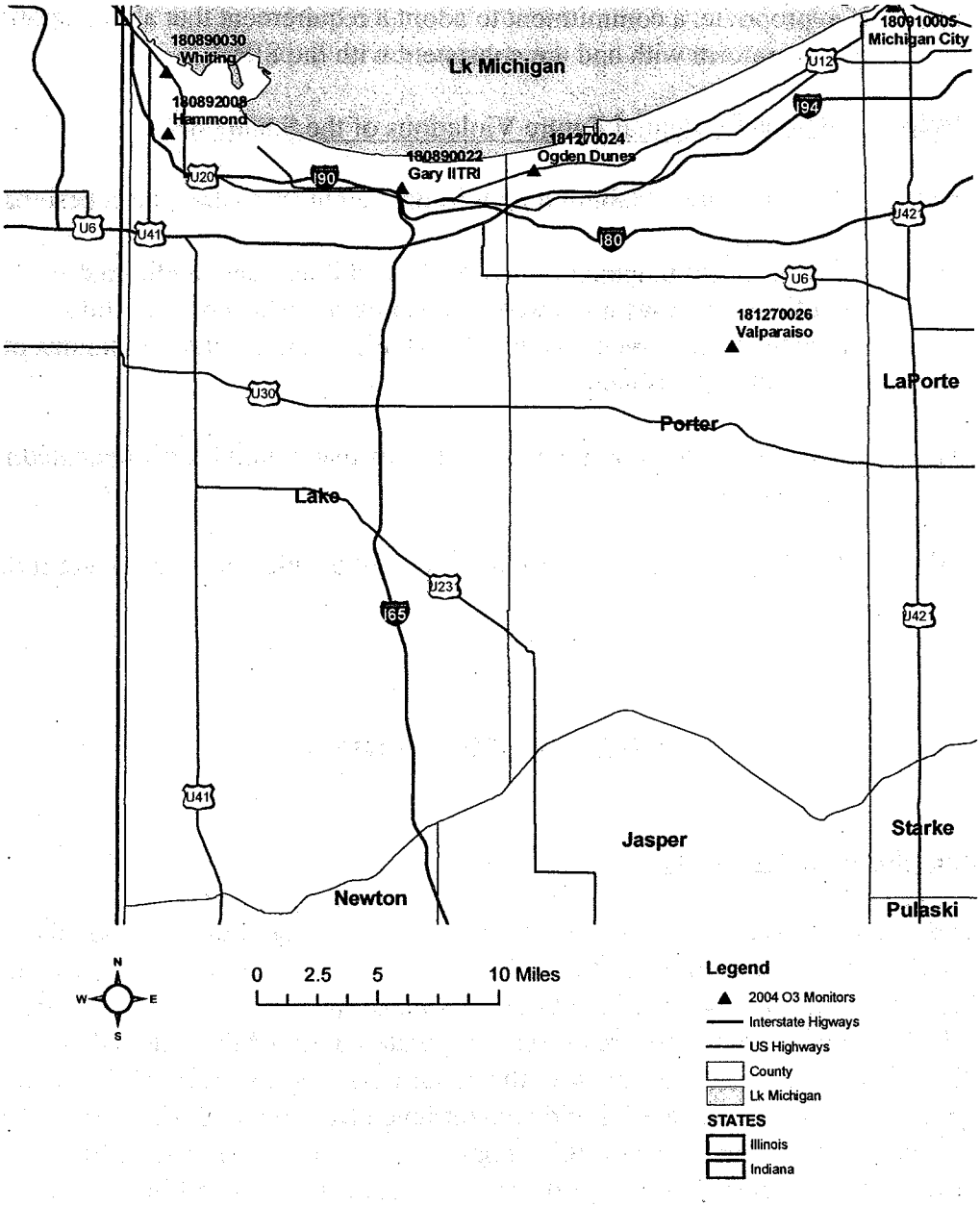
3.0 OZONE MONITORING

3.1 Ozone Monitoring Network

There are currently five (5) monitors measuring ozone concentrations in Indiana's portion of the nonattainment area (three in Lake County, and two in Porter County). Since the Whiting site commenced service in 2004, only four of these sites measured air quality for 2003-2005. All of the monitors are currently operated by IDEM's Office of Air Quality (OAQ). A listing of the sites along with their four (4) highest annual readings from 2003 through 2005 is shown in Table 3.1 and was retrieved from the U.S. EPA AQS. The locations of the monitoring sites for this nonattainment area are shown on Figure 3.1. The State of Illinois operates twenty (20) ozone monitoring sites within its portion of the nonattainment area.

Figure 3.1

Lake and Porter County Nonattainment Area



3.2 Ambient Ozone Monitoring Data

The following information is taken from U.S. EPA's "Guideline on Data Handling Conventions for the 8-Hour Ozone National Ambient Air Quality Standard (NAAQS)," EPA-454/R-98-017, December 1998.

Three (3) complete years of ozone monitoring data are required to demonstrate attainment at a monitoring site. The 8-hour primary and secondary ozone ambient air quality standards are met at an ambient air quality monitoring site when the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm. When this occurs, the site is deemed to be in attainment. Three (3) significant digits must be carried in the computations. Because the third decimal digit, in ppm, is rounded, 0.084 ppm is the largest concentration that is less than or equal to 0.08 ppm. Therefore, for the purposes of this request, the 8-hour standard is considered to be 0.085 ppm. Values below 0.085 ppm meet the standard, values equal to or greater than 0.085 ppm exceed the standard. These data handling procedures are applied on an individual basis at each monitor in the area. An area is in compliance with the 8-hour ozone NAAQS if, and only if, every monitoring site in the area meets the NAAQS. An individual site's three (3) year average of the annual fourth highest daily maximum 8-hour average ozone concentration is also called the site's design value. The air quality design value for the area is the highest design value among all sites in the area. Table 3.1 outlines the annual fourth high values by site, the 2002 – 2004 design values, and the 2003 – 2005 design values for the five active monitoring sites in Indiana's portion of the nonattainment area. Table 3.2 provides the 2003 - 2005 data for the twenty monitors within Illinois' portion of the nonattainment area operational during the same period. None of these twenty-five monitors has a design value greater than .080 ppm.

Table 3.1: Monitoring Data for Lake and Porter Counties (Annual 4th High and 2003-2005 Design Values in ppm)

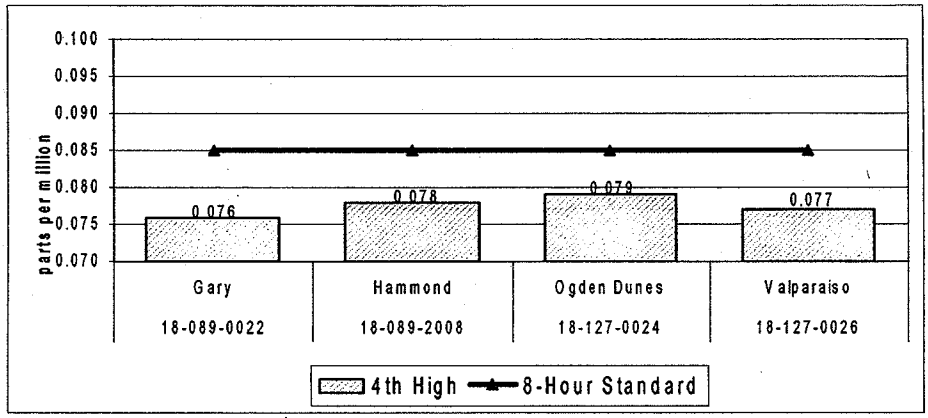
Site	2002	2003	2004	2005	02-04 avg	03-05 avg
GARY	0.094	0.076	0.064	0.089	0.078	0.076
HAMMOND	0.101	0.081	0.067	0.087	0.083	0.078
OGDEN DUNES	0.101	0.077	0.069	0.09	0.082	0.079
VALPARAISO	0.100	0.082	0.072	0.078	0.084	0.077
WHITING	N/A	N/A	0.064	0.088	N/A	N/A

Table 3.2: Monitoring Data for Illinois Sites
(Annual 4th High and 2003-2005 Design Values in ppm)

County	Site	2003	2004	2005	03-05 avg
Cook	Alsip	0.077	0.065	0.084	0.075
Cook	Chicago-Cheltenham	0.080	0.067	0.076	0.074
Cook	Chicago-Adams	0.078	0.069	0.080	0.076
Cook	Chicago-Luella	0.069			0.069
Cook	Chicago-Ellis Ave	0.067	0.054	0.084	0.068
Cook	Chicago-Ohio St	0.075	0.060	0.081	0.072
Cook	Chicago-Lawndale		0.068	0.084	0.076
Cook	Chicago-Hurlbut St	0.077	0.067	0.083	0.076
Cook	Lemont	0.075	0.067	0.086	0.076
Cook	Cicero	0.070	0.059	0.075	0.068
Cook	Des Plaines	0.073	0.064	0.079	0.072
Cook	Northbrook	0.080	0.068	0.081	0.076
Cook	Evanston	0.082	0.075	0.082	0.080
DuPage	Lisle	0.066	0.065	0.078	0.070
Kane	Elgin	0.076	0.069	0.087	0.077
Lake	Waukegan	0.074	0.068	0.087	0.076
Lake	IL Beach St Pk	0.078	0.071	0.090	0.080
McHenry	Cary	0.079	0.068	0.087	0.078
Will	Sout	0.077	0.064		0.071
Will	Essex Rd	0.073	0.068	0.077	0.073

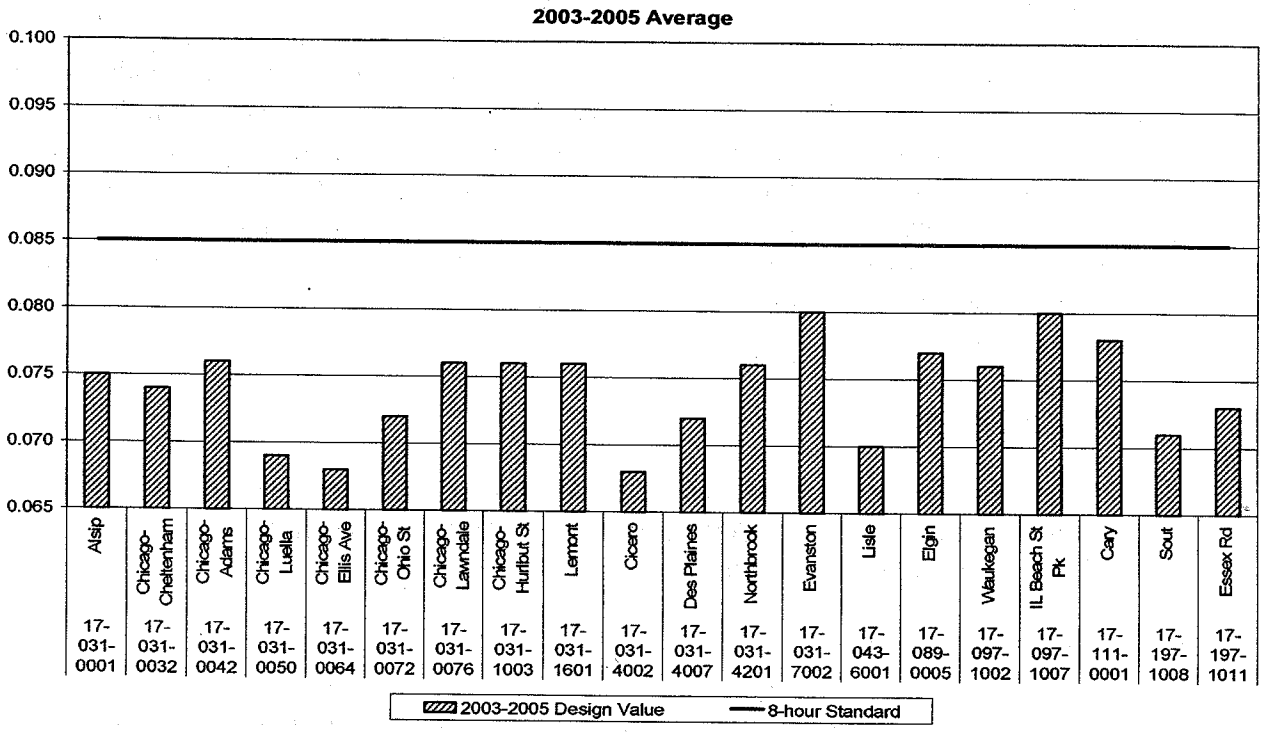
The graph below visually demonstrates the design values for this nonattainment area. The highest design value within Indiana's portion of the nonattainment area is .079 ppm.

Graph 3.1
2003-2005 Design Values for Lake and Porter Counties
(Indiana's Portion of Nonattainment Area)



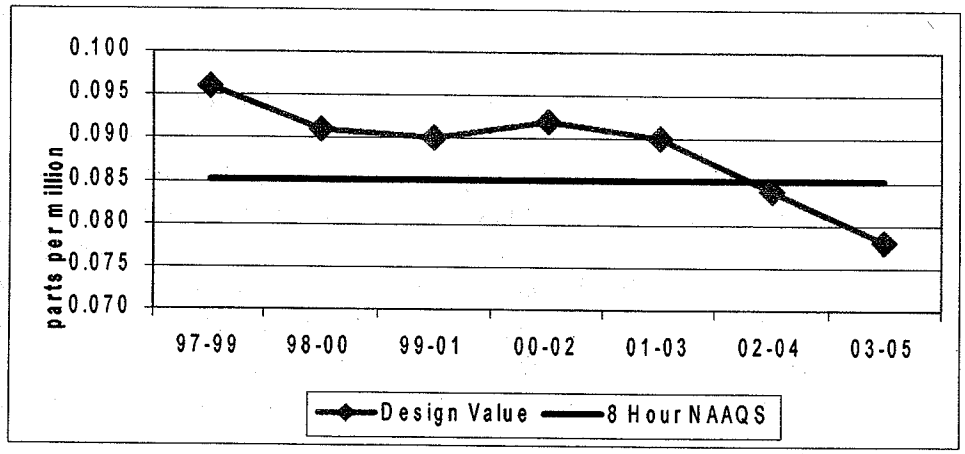
Graph 3.2 illustrates the design values for the Illinois portion of the nonattainment area.

Graph 3.2
2003-2005 Design Values for Illinois' Portion of Nonattainment Area in ppm



The design values for Lake and Porter counties, along with the nonattainment area in its entirety, demonstrate that the NAAQS for ozone has been attained. All 2003-2005 design values are less than or equal to .080 ppm.

Graph 3.3 Trends in Northwest Indiana 8-Hour Design Values
1997 through 2005



Graph 3.3 shows the trend in design values for Lake and Porter counties over the past seven years. A comprehensive list of the individual sites' design values over this period is in Appendix A. The area's design values have recently trended downward as emissions have declined due to such programs as the Acid Rain program and cleaner automobiles and fuels both regionally and locally. U.S. EPA's rule to control nitrogen oxides from specific source categories (40 CFR Parts 51, 72, 75 and 96, published on October 17, 1998 and referred to as the "NO_x SIP Call") has significantly reduced emissions from large electric generating units (EGUs), industrial boilers, and cement kilns. Indiana's NO_x Rule was approved on June 6, 2001 (326 IAC 10-3 and 10-4). The SIP submittals of other Midwest states were approved in this timeframe as well. An analysis of meteorological conditions and monitoring values is in Section 7.0 and supports the conclusion that attainment of the standard as of 2005 is not the result of unusually favorable meteorological conditions. It is expected that this downward trend will continue as the above programs continue and the U.S. EPA Clean Air Interstate Rule is implemented.

3.3 Quality Assurance

IDEM has quality assured all data shown in Appendix A in accordance with 40 CFR 58.10 and the Indiana Quality Assurance Manual. IDEM has recorded the data in the AQS database and, thus, the data are available to the public.

3.4 Continued Monitoring

Indiana commits to continue monitoring ozone levels at the sites indicated in Table 3.1 and Appendix A. IDEM will consult with U.S. EPA Region V staff prior to making changes to the existing monitoring network, should changes become necessary in the future. IDEM will continue to quality assure the monitoring data to meet the requirements of 40 CFR 58. Connection to a central station and updates to the IDEM website[1] will provide real time availability of the data and knowledge of any exceedances. IDEM will enter all data into AQS on a timely basis in accordance with federal guidelines.

4.0 EMISSION INVENTORY

U.S. EPA's Redesignation Guidance requires the submittal of a comprehensive inventory of ozone precursor emissions (VOC and NO_x) representative of the year when the area achieves attainment of the ozone air quality standard. Indiana must also demonstrate that the improvement in air quality between the year that violations occurred and the year that attainment was achieved is based on permanent and enforceable emission reductions. Other emissions inventory-related requirements include a projection of the emission inventory to a year at least ten (10) years following redesignation; a demonstration that

[1] www.in.gov/idem/air

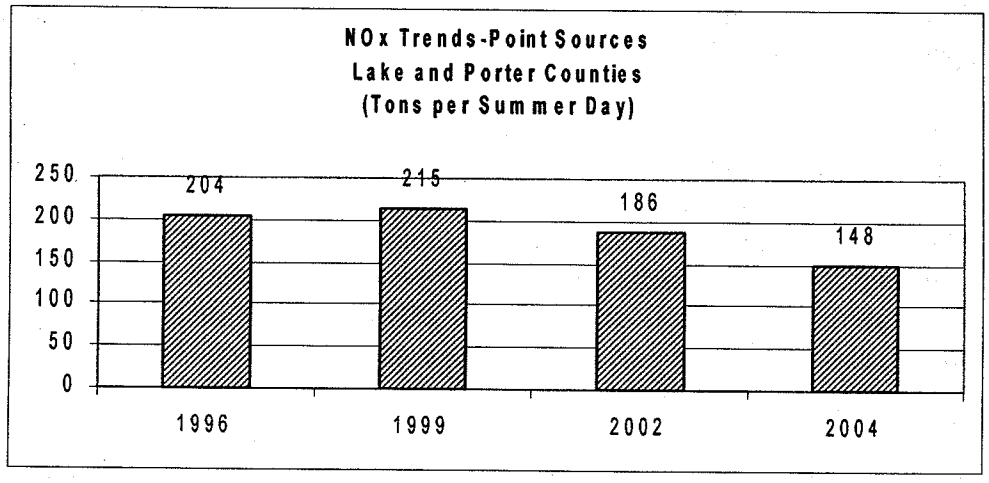
the projected level of emissions is sufficient to maintain the ozone standard; and a commitment to provide future updates of the inventory to enable tracking of emission levels during the ten (10) year maintenance period.
The following subsections address each of these requirements.

4.1 Emission Trends

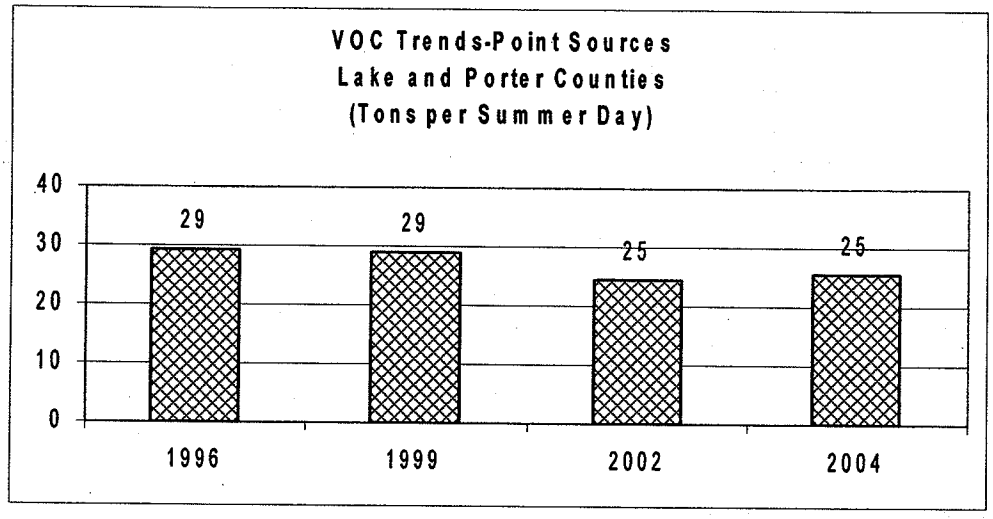
Point Sources

Graphs 4.1 and 4.2 show the trends in point source emissions of NO_x and VOC respectively that generally correspond to the years of monitored values referenced in this report. The point source data are taken from Indiana's annual emissions reporting program.

Graph 4.1 Northwest Indiana NO_x Point Source Emissions 1996 – 2004



Graph 4.2 Northwest Indiana VOC Point Source Emissions 1996 – 2004



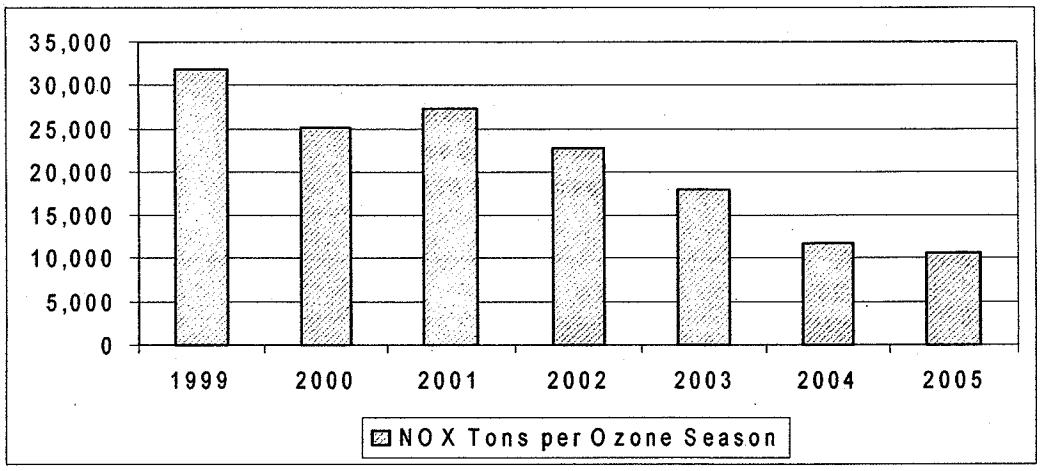
EGU Sources

Graph 4.3 shows the trends in regional NO_x emissions from EGUs for Northwest Indiana, including Jasper, Lake, LaPorte, and Porter counties. Graph 4.4 depicts the trends in statewide NO_x emissions from EGUs. While ozone and its precursors are also transported into this region from outside areas, this information does provide some indication of the impact that Indiana sources may have on the nonattainment area. The emissions are decreasing substantially in response to national programs affecting all EGUs such as the Acid Rain program and the NO_x SIP Call. Other sectors of the inventory also impact ozone formation, but large regional sources such as EGUs have a substantial impact on the formation of ozone.

These data were taken from U.S. EPA's Clean Air Markets database[2]. Data are available sooner for these units than other point sources in the inventory because of the NO_x SIP Call budget and trading requirements. Information from 2003 is significant because some EGUs started operation of their NO_x SIP Call controls in order to generate Early Reduction Credits for their future year NO_x budgets. The first season of the SIP Call budget period began May 31, 2004.

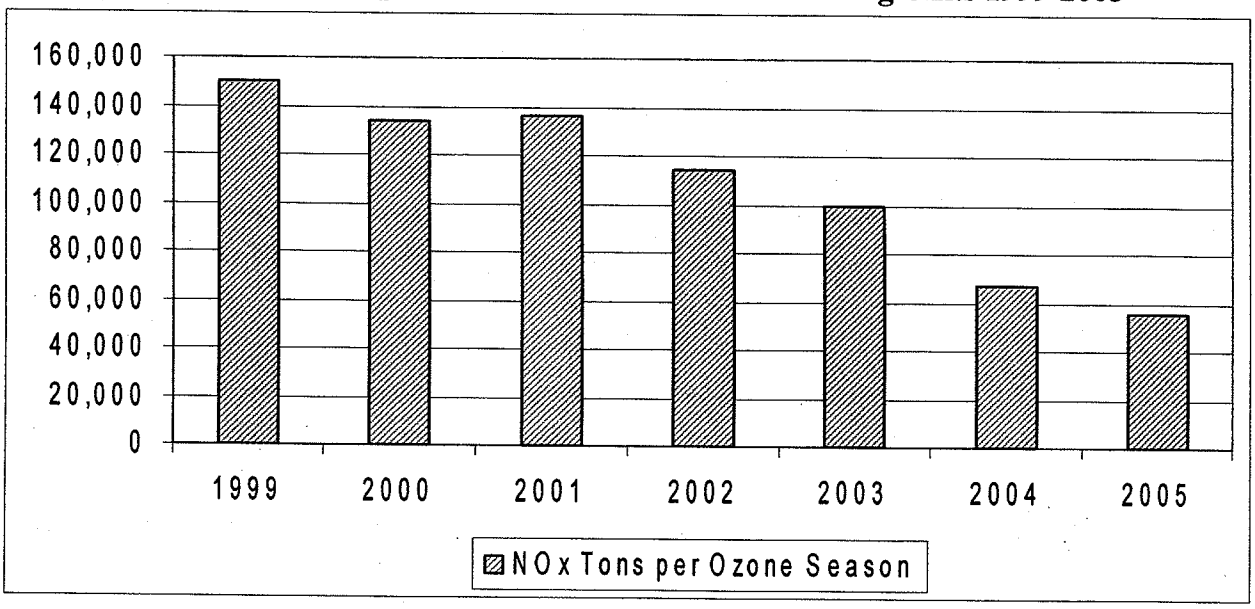
As part of the NO_x SIP Call, the states were required to adopt into their rules a budget for all large EGUs. Indiana's budget is referenced in 326 IAC 10-4. The budget represents a statewide cap on NO_x emissions. Although each unit is allocated emissions based upon historic heat input, utilities can meet this budget by over-controlling certain units or purchasing credits from the market to account for overages at other units. To summarize, NO_x emissions have dramatically decreased over the years represented on these graphs. These emissions, capped by the state rule, should remain at least this low through the maintenance period covered by this request.

Graph 4.3 NO_x Emissions from Northwest Indiana Electric Generating Units 1999-2005



[2] http://www.epa.gov/airmarkets

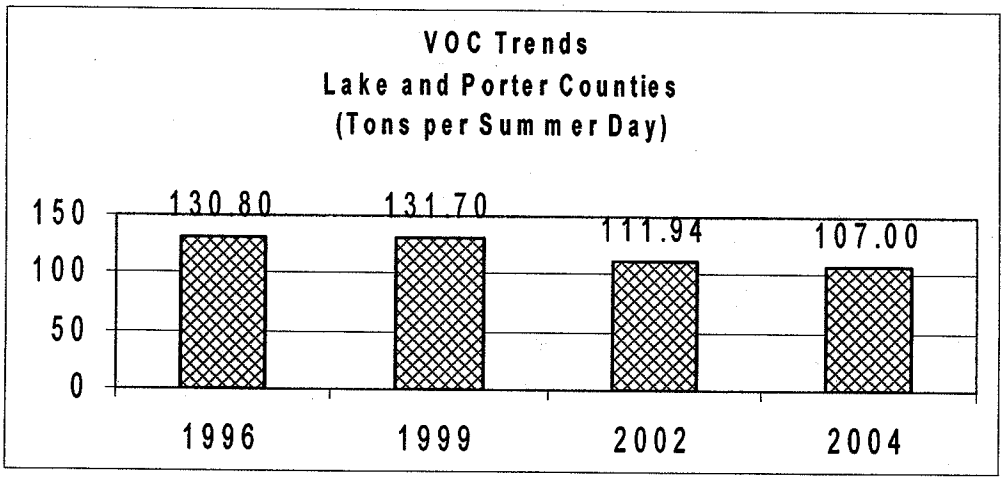
Graph 4.4 Statewide NO_x Emissions from Electric Generating Units 1999-2005



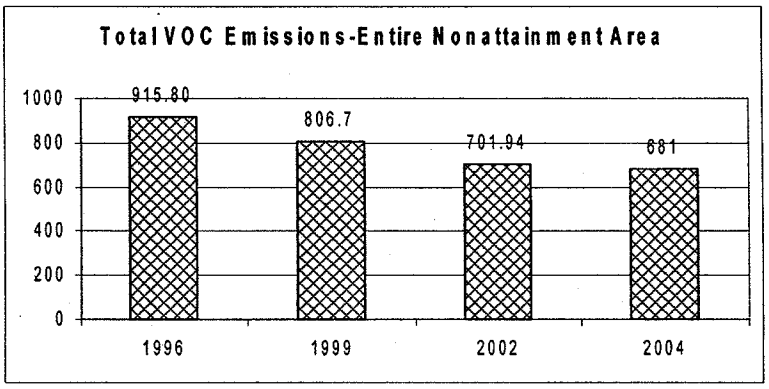
All Anthropogenic Sources

Periodic inventories, which include emissions from all sectors - mobile, area, non-road, and point sources - were prepared for 1996, 1999, 2002 and 2004. Graphs 4.5, 4.6, 4.7, and 4.8 show the trends for the total emissions for all anthropogenic source categories (within Lake and Porter counties, and the entire nonattainment area), which also roughly follow the years of monitored air quality trends discussed in Section 3. Graphs and data tables of emissions from each source category are available in Appendix B.

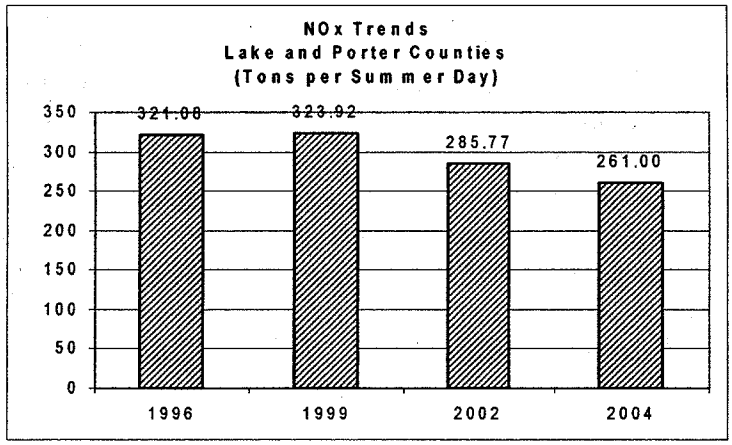
Graph 4.5 VOC Emissions Trends, 1996 - 2004, All Sources in Lake and Porter Counties



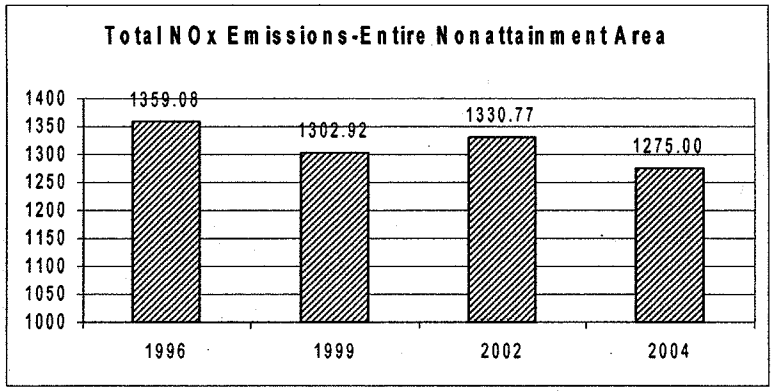
Graph 4.6 Total VOC Emissions Trends, 1996 - 2004, Entire Nonattainment Area (Tons per Summer Day)



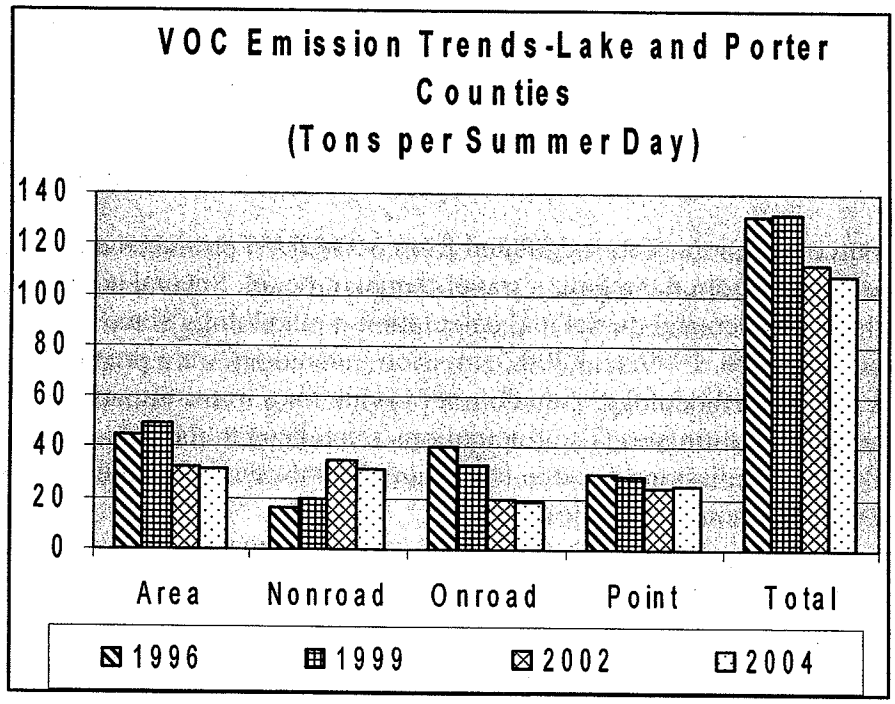
Graph 4.7 NO_x Emissions Trends, 1996 - 2004, All Sources in Lake and Porter Counties



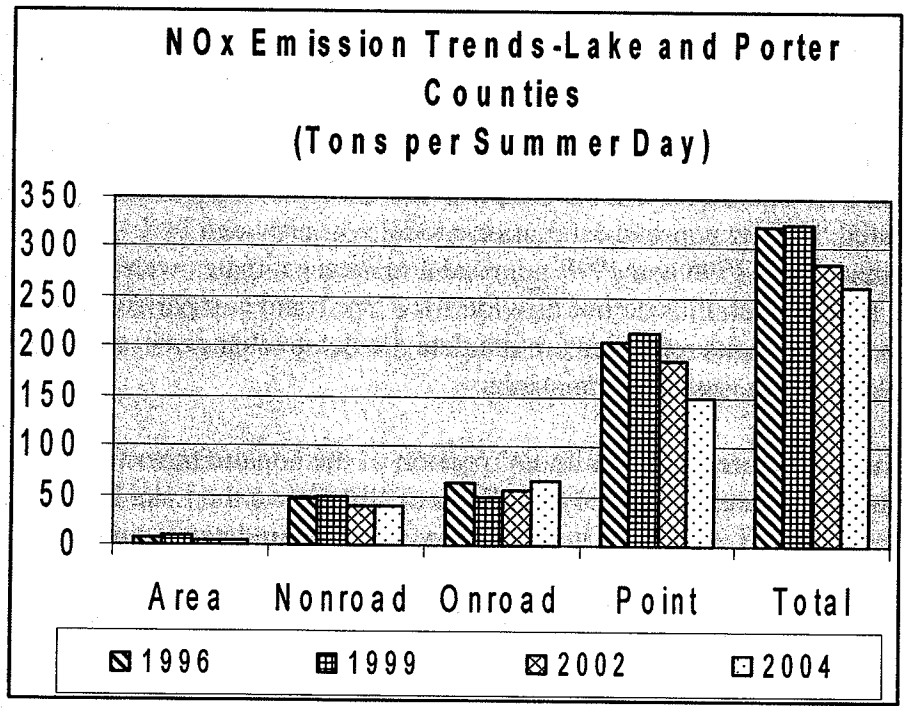
Graph 4.8 Total NO_x Emissions Trends, 1999 - 2004, Entire Nonattainment Area (Tons per Summer Day)



Graph 4.9 VOC Emission Trends by Category-Lake and Porter Counties



Graph 4.10 NO_x Emission Trends by Category-Lake and Porter Counties



4.2 Base Year Inventory

IDEM prepared a comprehensive inventory for Lake and Porter counties, including area, mobile, and point sources for precursors of ozone (volatile organic compounds and nitrogen oxides) for the base year 2004 (the middle year of the area's attainment design value).

- Area sources were grown from the Indiana 2002 periodic inventory submitted to U.S. EPA.
- Mobile source emissions were calculated from MOBILE6 produced emission factors and data extracted from the region's travel-demand model. Several adjustments were made to the travel demand model and calculation methodology since 1996. As a result, since the 1996, 1999, and 2002 emission inventories were prepared with slightly different methodology, they do not provide for a true comparison with the 2004 through 2020 estimates. The fluctuations referenced in the data, particularly 1996 – 2002 NO_x emissions, are due to changes in the calculation methodology, not necessarily mobile source emissions.
- Point source information was compiled from IDEM's 2004 annual emissions statement database and the 2005 U.S. EPA Air Markets acid rain database[3].
- Biogenic emissions are not included in these summaries.
- 2004 nonroad emissions were grown from the 2002 National Emissions Inventory (NEI). To address concerns about the accuracy of some of the categories in U.S. EPA's nonroad emissions model, the Lake Michigan Air Directors' Consortium (LADCO) (Midwest Regional Planning Organization), contracted with two (2) companies to review the base data and make recommendations. One of the contractors also estimated emissions for two (2) nonroad categories not included in U.S. EPA's nonroad model. Emissions were estimated for commercial marine vessels and railroads. Recreational motorboat population and spatial surrogates (used to assign emissions to each county) were significantly updated. The populations for the construction equipment category were reviewed and updated based upon surveys completed in the Midwest and the temporal allocation for agricultural sources was also updated. A new nonroad estimation model was provided by U.S. EPA for the 2002 analysis. The 1996 and 1999 nonroad emission estimates were generated by a previous EPA model, thus do not provide for a true trend comparison, especially for VOC. The fluctuations referenced in the data are due to changes in the model and methodology, not necessarily emissions.

The emissions data referenced for Illinois' portion of the nonattainment area (entire nonattainment area) were provided by the State of Illinois via the Lake Michigan Air Directors Consortium (LADCO). This inventory was prepared using similar methodologies. However, it should be noted that the emissions data referenced for Illinois' portion of the nonattainment area is draft and subject to change. Indiana

[3] http://www.epa.gov/airmarkets/acidrain

recognizes that revisions to Section 4 of this document may be necessary once Illinois prepares a maintenance plan for its portion of the nonattainment area.

Appendix B contains data tables and graphs of all these emissions.

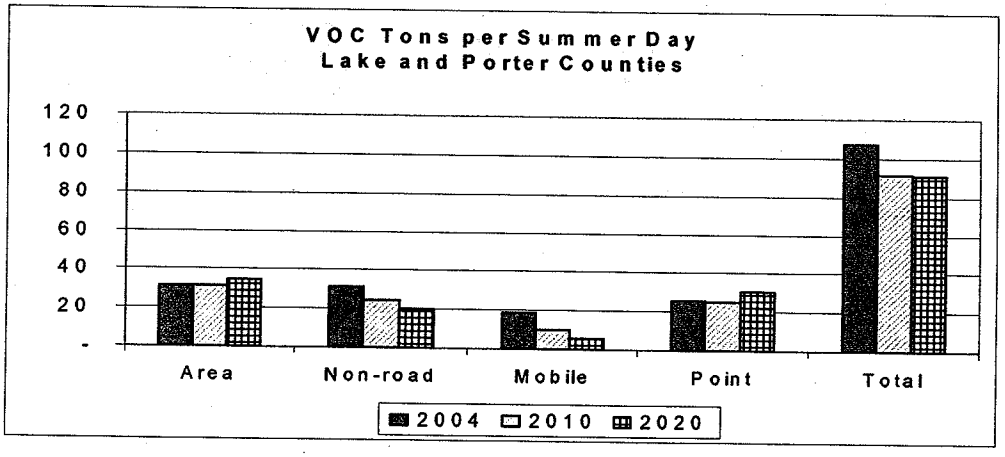
4.3 Emission Projections

In consultation with the U.S. EPA and other stakeholders, IDEM selected the year 2020 as the maintenance year for this redesignation request. This document contains projected emissions inventories for 2010 and 2020.

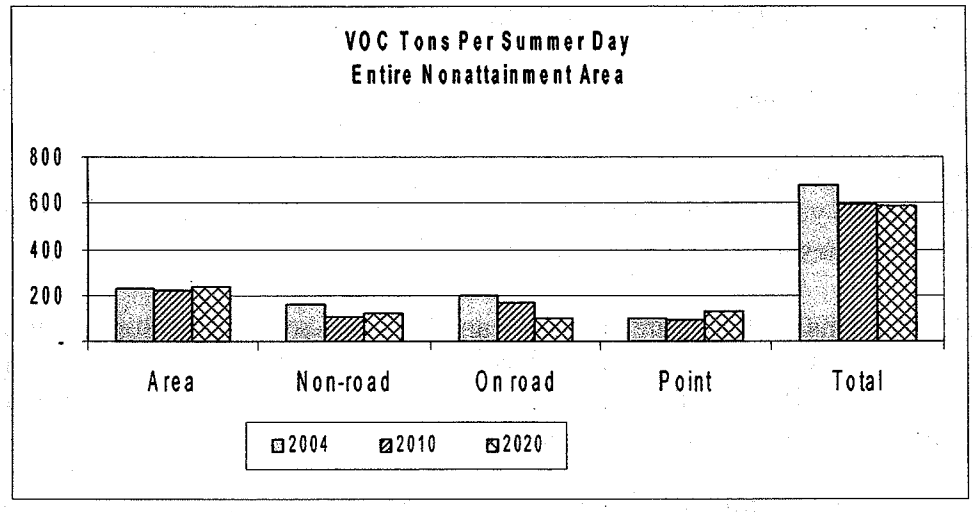
Emission projections were prepared for Lake and Porter counties, as well as for the entire nonattainment area. IDEM, with assistance from LADCO, prepared emission projections for 2010 and 2020. IDEM received 2010 and 2020 emission projections from LADCO for the Illinois portion of the nonattainment area.

The detailed inventory information for Lake and Porter counties for 2010 and 2020 is in Appendix B. Emission trends are an important gauge for continued compliance with the ozone standard. Therefore, IDEM performed an initial comparison of the inventories for the base year (2004), interim year (2010), and maintenance year (2020) for Lake and Porter counties and the entire nonattainment area. Graphs 4.9 and 4.11 visually compare the 2004 (base year) estimated emissions with the 2010 and 2020 projected emissions for Lake and Porter counties. Graphs 4.10 and 4.12 visually compare the 2004 (base year) estimated emissions with the 2010 and 2020 projected emission for the entire nonattainment area. Mobile source emission inventories are described in Section 5. In addition to the Midwest RPO's estimates, point source emissions were projected based upon the statewide EGU NO_x budgets from the Indiana NO_x rule.

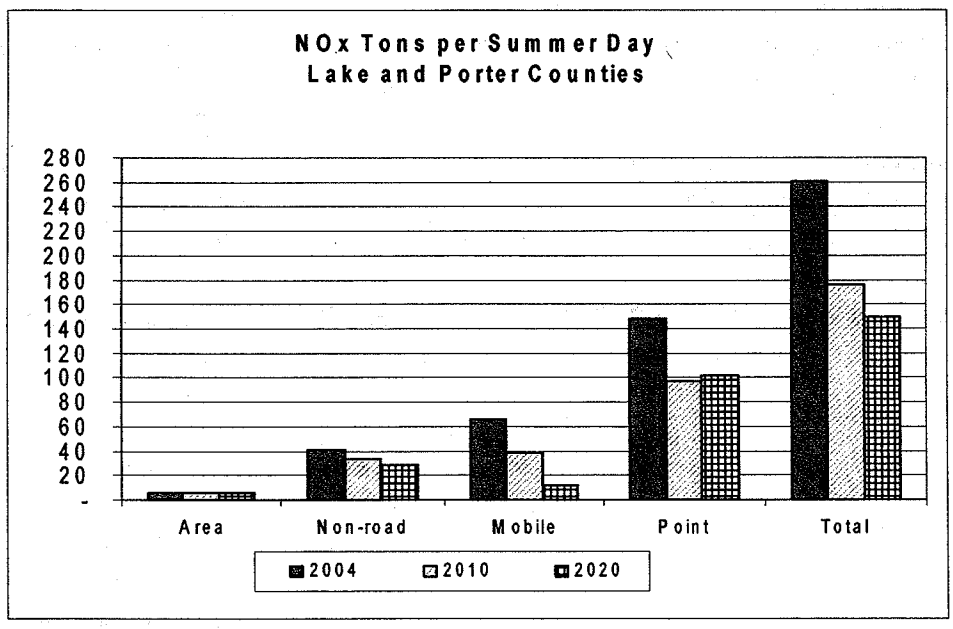
Graph 4.11 Comparison of 2004 Estimated and 2010 and 2020 Projected VOC Emissions for Lake and Porter Counties



Graph 4.12 Comparison of 2004 Estimated and 2010 and 2020 Projected VOC Emissions for Entire Nonattainment Area



Graph 4.13 Comparison of 2004 Estimated and 2010 and 2020 Projected NO_x Emissions for Lake and Porter Counties



Graph 4.14 Comparison of 2004 Estimated and 2010 and 2020 Projected NO_x Emissions for Entire Nonattainment Area

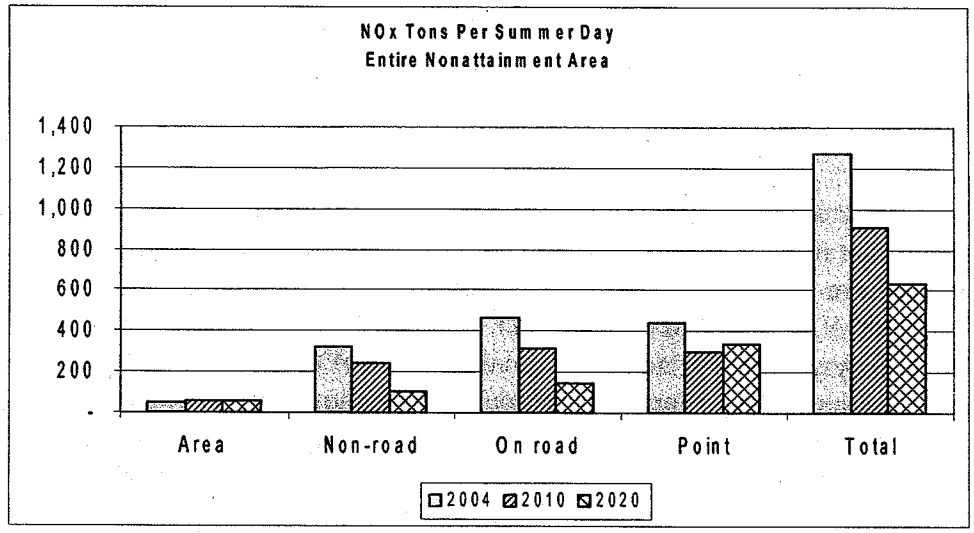


TABLE 4.1 Comparison of 2004 estimated and 2020 projected emission estimates in tons per summer day Lake and Porter Counties, Indiana

Table 4.1	2004	2020	Change	% change
NOX	261.00	149.03	-111.97	-42.90
VOC	107.51	91.13	-16.38	-15.24

TABLE 4.2 Comparison of 2004 estimated and 2020 projected emission estimates in tons per summer day for entire nonattainment area

Table 4.2	2004	2020	Change	% change
NOX	1274.57	638.14	-636.43	-49.93
VOC	681.52	586.01	-95.51	-14.01

VOC emissions within Lake and Porter counties are projected to decline by more than 15% between 2004 and 2020, and VOC emissions within the entire nonattainment area are projected to decrease by approximately 14%. NO_x emissions within Lake and Porter counties are projected to decline by over 40% between 2004 and 2020. NO_x emissions within the entire nonattainment area are projected to decrease by nearly 50%. Emission reduction benefits from U.S. EPA rules covering the NO_x SIP Call, Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements[4], Highway Heavy-Duty Engine Rule[5] and Non-Road Diesel Engine Rule[6] are factored into the changes. Further, due to implementation of the NO_x SIP Call across the eastern United States, NO_x and

[4] http://www.epa.gov/fedrgstr/EPA-AIR/2000/February/Day-10/a19a.htm

[5] http://www.epa.gov/fedrgstr/EPA-AIR/1997/October/Day-21/a27494.htm

[6] http://www.epa.gov/fedrgstr/EPA-AIR/1998/October/Day-23/a24836.htm

ozone levels entering this area will also decrease. The Clean Air Interstate Rule (CAIR), issued in March 2005 and to be implemented in late 2006, will reduce regional EGU NO_x emissions by approximately another 15% in 2015. Since CAIR is a regional cap and trade program, it is difficult to predict what effect this will have on EGU units located in Lake and Porter Counties or other upwind counties at this time. Therefore, potential reductions are not included in Graph 4.7 or Table 4.1.

4.4 Demonstration of Maintenance

Ambient air quality data from all monitoring sites indicate that air quality in Lake and Porter counties met the NAAQS for ozone in both 2004 and 2005. Furthermore, ambient air quality data from all monitoring sites within the entire nonattainment area indicate that air quality met the NAAQS for ozone in 2005. U.S. EPA's Redesignation Guidance (p 9) states, "A state may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emissions rates will not cause a violation of the NAAQS." Emissions projections outlined in Section 4 of this document clearly illustrate that VOC and NO_x emissions will continue to decline between 2004 (base year) and 2020. Section 7.0 further discusses the implications of these emissions trends and provides an analysis to support these conclusions. Therefore, air quality should meet the NAAQS ozone standard through the projected years of 2010 and 2020.

In Indiana, major point sources in all counties are required to submit air emissions information once every three (3) years or annually if VOC potential to emit is greater than 250 tons or NO_x potential to emit is greater than 2500 tons, in accordance with the Emission Statement Rule, 326 IAC 2-6. IDEM prepares a new periodic inventory for all ozone precursor emission sectors every three (3) years. These ozone precursor inventories will be prepared for 2005, 2008, and 2011 as necessary to comply with the inventory reporting requirements established in the CAAA. Emissions information will be compared to the 2004 base year and the 2020 projected maintenance year inventories to assess emission trends, as necessary, to assure continued compliance with the ozone standard.

4.5 Permanent and Enforceable Emissions Reductions

Permanent and enforceable reductions of volatile organic compounds and oxides of nitrogen have resulted in achieving attainment of the 8-hour ozone standard. Some of these reductions were due to the application of RACT rules and some were due to the application of tighter federal standards on new vehicles. Also, Title IV of the Clean Air Act and the NO_x SIP Call required the reduction of oxides of nitrogen from utility sources. Section 6.0 identifies the emission control measures specific to Lake and Porter counties, as well as the implementation status of each measure.

4.6 Provisions for Future Updates

As required by Section 175A(b) of the CAAA, Indiana commits to submit to the Administrator, eight (8) years after redesignation, an additional revision of this SIP. The revision will contain Indiana's plan for maintaining the national primary ozone air quality standard for ten (10) years beyond the first ten (10) year period after redesignation.

5.0 TRANSPORTATION CONFORMITY BUDGETS

5.1 On-Road Emission Estimations

The Northwest Indiana Regional Planning Commission (NIRPC) is the Metropolitan Planning Organization (MPO) for the area that includes Lake, Porter and LaPorte counties. This organization maintains a travel demand forecast model that is used to simulate the traffic in the area and to predict what that traffic would be like in future years given growth expectations. The model is used mostly to identify where travel capacity will be needed and to determine the infrastructure requirements necessary to meet that need. It is also used to support the calculation of mobile source emissions. The travel demand forecast model is used to predict the total daily Vehicle Miles Traveled (VMT) and an EPA software program called MOBILE6 is used to calculate the emissions per mile. The product of these two outputs, once combined, is the total amount of pollution emitted by the on-road vehicles for the particular analyzed area.

5.2 Overview

Broadly described, MOBILE6 is used to generate "emission factors", which are the average emissions per mile (grams/mile) for ozone precursors: NO_x and VOC. There are numerous variables that can affect the emission factors. The vehicle fleet (vehicles on the road) age and the vehicles-types have a major effect on the emission factors. The facility-type the vehicles are traveling on (MOBILE6 facility-types are Freeway, Arterial, Local and Ramp) and the vehicle speeds also affect the emission factor values. Meteorological factors such as air temperature and humidity, and the area's Inspection/Maintenance program affect the emission factors as well. Once emission factors are determined, the emission factor(s) is multiplied by the vehicle-miles-traveled (VMT) to ultimately determine the quantity of vehicle emissions. VMT data is generated by the region's travel demand model.

5.3 Best Available Data

Depending on the details of the travel demand model, much of MOBILE6 input data for emission factor computation can be found in the model, but some must come from other sources. The NIRPC travel demand model has more detailed data than most models. While almost all models contain traffic speed and road-type data, the NIRPC model contains information for vehicle-type as well. It monitors the movement of three

vehicle-types: (1) cars, (2) light freight trucks and buses and (3) heavy trucks. The model also does a better job of speed analysis because it describes 3 times of day: (1) AM (morning) peak hour, (2) PM (afternoon) peak hour, and (3) off peak hours. This allows for a much more thorough and accurate analysis of speeds over the course of the day.

Vehicle Age Distribution

MOBILE6 has 16 different vehicle-type categories differentiated by weight. The first 5 are generally passenger vehicles: cars, vans and SUVs. The others are different sized trucks and buses and the last is motorcycles. This MOBILE6 vehicle age distribution describes what fraction of each of the 16 vehicle-types is one year old, two years old, etc., up to the 25-and-older category. MOBILE6 has a default age profile of each vehicle-type taken from national surveys.

Due to its geographic proximity to Chicago, Northwestern Indiana is a through-traffic area for an enormous amount of freight transportation. National default age profiles make sense to use for freight vehicles, but for passenger vehicles, local data exists and was used for the age distribution for these first 5 MOBILE6 vehicle-types.

Vehicle Identification Numbers (VIN) provided by the Indiana Bureau of Motor Vehicles (BMV) for the year 2003 for Lake and Porter counties were decoded and split into the first 5 MOBILE6 vehicle-types. These age distributions are not expected to change much over time so they do not change for the different analysis years.

Speeds

Speeds can be an input to MOBILE6 in two different ways. MOBILE6 assumes Local and Ramp facility-types have fixed speeds of 12.9 and 34.6 mph, respectively. This cannot be changed; only Arterial and Freeway speeds can be input to MOBILE6. There is an Average Speed command that allows the average Freeway or Arterial speeds to be input. This is used extensively when building cross-reference tables for the emission factors mentioned previously. The most accurate and thorough MOBILE6 speed input method is to input speeds via two speed tables (one for each facility-type) which contain the fraction of VMT for each hour of the day that occurs in 14 speed-bins: 0-2.5mph, 2.5-7.5mph...up to >62.5 mph. Speeds that occur during the peak hours would be slower than the off peak, for example. MOBILE6 does contain national average default speeds that are useful for comparison purposes.

NIRPC uses the latter, more thorough method of inputting speeds. The travel model data are used for speed calculations. Each link of roadway has a speed calculated using the formulas shown below. The link volume, length and calculated speed are used to determine the VMT fraction to place into the proper speed bin in the speed tables.

The BPR (Bureau of Public Roads) Formula is used as follows:

Amtime=length/ (posted speed*1.1)*60*(1+0.15*(volume/ (2.55*capacity per lane*lanes)) ^4)
Pmtime=length/ (posted speed*1.1)*60*(1+0.15*(volume/ (2.84*capacity per lane*lanes) ^4)
Optime=length/ (posted speed*1.1)*60*(1+0.15*(volume/ (12*capacity per lane*lanes) ^4).
speed=length*60/xxtime

Socioeconomic data

Travel demand models contain hundreds of Travel Analysis Zones (TAZs) that have zone-specific information regarding population, employment, destinations and expected growth, among other things. These data are commonly referred to as the "socioeconomic data". These data are updated most accurately when new census data comes out. This model was updated in 2003 based on 2000 census data. The traffic analyses of future years are then based on growth projections. These growth projects are then put into the TAZs where the growth (or decline) is expected to occur.

5.4 Analysis Years

The travel demand model also contains the road network, thus, the information is time specific. NIRPC has modeled the years 2004, 2010 and 2020. Each future analysis year model scenario contains the road network NIRPC expects to exist at the beginning of that year with the concomitant expected socioeconomic growth projections.

5.5 Emission Estimations

Table 5.1 contains the results of the emissions analysis for the appropriate years.

Table 5.1 - Emission Estimations for On-Road Mobile Sources

Lake & Porter	2004	2010	2020
VMT (miles/day)	20,286,851	21,194,922	24,958,812
VOC (tons/day)	18.90	9.93	5.71
NOx (tons/day)	65.95	38.65	11.97

5.6 Motor Vehicle Emission Budget

Table 5.2 contains the motor vehicle emissions budget for the Lake & Porter ozone nonattainment area for the years 2010 and 2020.

Table 5.2 – Mobile Vehicle Emission Budgets

	2010	2020
VOC (tons/day	11.5	6.00
NOx (tons/day)	40.6	12.60

This budget includes the emission estimates calculated for 2010 and 2020, and a 5% margin for error. For purposes of establishing the mobile vehicle emission budgets, the final budgets were rounded up to the next tenth of a ton. Since assumptions change over time, IDEM determined a 5% margin for error to be necessary to account for such changes within the conformity process. The emission estimates derive from the NIRPC travel demand model and MOBILE6 as described above under the expected NIRPC 2030

Long Range Plan, which is yet to be fully adopted. The emissions calculation methodology and latest planning assumptions were determined through the interagency consultation process described in the Transportation Conformity Memorandum of Understanding (MOU) for NIRPC.

Table 5.3 - Estimated 2040 Mobile Source Emissions for Lake and Porter Counties

Lake and Porter	2040
VMT (miles/day)	34,548,871
VOC (tons/day)	7.16
NO_x (tons/day)	7.96

According to the data in Table 5.3, it appears that the motor vehicle VOC emissions budget for the year 2020 may be inadequate once the long-range transportation plan horizon is extended to 2040. Therefore, IDEM commits to establish a 2040 motor vehicle emissions budget in an amendment to this maintenance plan within twenty-four months from U.S. EPA approval. Table 5.3 is outlined above for illustrative purposes and does not necessarily represent the budget that will be amended into the maintenance plan in the future.

6.0 CONTROL MEASURES AND REGULATIONS

This section provides specific information on the control measures implemented in Lake and Porter counties, including CAAA requirements and additional state or local measures implemented beyond CAAA requirements.

6.1 Reasonably Available Control Technology (RACT)

As required by Section 172 of the CAAA, Indiana in the mid-1990s promulgated rules requiring RACT for emissions of VOCs. There were no specific rules required by the CAA such as RACT for existing sources beyond statewide rules. Statewide RACT rules have applied to all new sources locating in Indiana since that time. The Indiana rules are found in 326 IAC 8. The following is a listing of applicable rules:

326 IAC 8-1 Best Available Control Technology-New Facilities
326 IAC 8-2 Surface Coating Emission Limitations
326 IAC 8-3 Solvent Degreasing Operations
326 IAC 8-4 Petroleum Sources
326 IAC 8-5 Miscellaneous Operations
326 IAC 8-6 Organic Solvent Emission Limitations

Additional rules specifically applicable to Lake and Porter counties are summarized in Section 6.2.

6.2 Implementation of Past SIP Revisions

Lake and Porter counties were previously nonattainment under the 1-hour ozone standard. The area met all of its 1-hour SIP obligations, including an EPA-approved attainment demonstration. All of the control measures outlined within the post-1999 (2002, 2005, and 2007) Rate of Progress plans have been fully implemented. Since the area was designated nonattainment for ozone under the 8-hour standard in 2004 and its attainment plan is not due until 2007, now that the area has attained the standard, no further SIP revisions are required.

The following outlines the measures implemented in association with previous SIP submittals that have resulted in permanent and enforceable emission reductions in Lake and Porter counties:

Fifteen Percent Rate of Progress (ROP) Plan
Indiana's final 15% ROP plan was approved by U.S. EPA on July 18, 1997. The measures include a mix of point, area, and mobile source control measures:
1. Enhanced vehicle inspection and maintenance program

Regulatory Basis: 326 IAC 13-1.1

Implementation Status: Control remains in place.

2. Stage II Vapor Recovery

Regulatory Basis: 326 IAC 8-11-2

Implementation Status: Control remains in place.

3. Reformulated gasoline program

Regulatory Basis: CAAA-Federal Control Program

Implementation Status: Control remains in place.

4. National Volatile Organic Compound Emission Standards for Architectural Coatings Rule

Regulatory Basis: 40 CFR Part 59

Implementation Status: Control remains in place.

5. Residential opening burning ban

Regulatory Basis: 326 IAC 4-1

Implementation Status: Control remains in place for all incorporated areas.

6. Non-CTG RACT

Regulatory Basis: 326 IAC 8

Implementation Status: Control remains in place.

1999 Nine Percent Rate of Progress (ROP) Plan

Indiana's final 1999 nine percent ROP plan was approved by U.S. EPA on January 26, 2000. The reductions included a variety of state and federal measures that affected various industrial and area sources, such as steel mills, small engines (e.g. lawnmowers), gasoline reformulation, and personal solvent usage. The measures included the following:

1. The National Emission Standards for Benzene from Coke Oven By-Product Recovery Plants

Regulatory Basis: 40 CFR 61 Subpart L

Implementation Status: Control remains in place.

2. National Emission Standards for Coke Oven Batteries,

Regulatory Basis: 40 CFR 63 Subpart L

Implementation Status: Control remains in place.

3. Federal Phase I Reformulated Gasoline on Small Non-road engines

Regulatory Basis: Clean Air Act Amendments of 1990; Section 211 of the Clean Air Act

Implementation Status: Control remains in place.

4. Federal Controls on Small Spark-ignited Engines

Regulatory Basis: Court-ordered standards for small spark-ignited engines; 40CFR Part 90

Implementation Status: Control remains in place.

5. Commercial/Consumer Solvent Reformulation Rule

Regulatory Basis: Clean Air Act Amendments of 1990; Federal Rule 60 FR 15264

Implementation Status: Control remains in place.

6. Volatile Organic Liquid Storage RACT

Regulatory Basis: 326 IAC 8-9

Implementation Status: Control remains in place.

2002 Nine Percent Rate of Progress (ROP) Plan

Indiana's 2002 nine percent ROP plan consists of several federal regulations and some measures specific to Indiana, including state rules and negotiated agreements. The reductions included measures that control the VOC emissions from steel mill sinter plans, non-road mobile sources, and municipal solid waste landfills. The measures included the following:

1. Additional Reductions from Federal Controls on Small Spark-ignited Engines

Regulatory Basis: Court-ordered standards for small spark-ignited engines; 40 CFR Part 90

Implementation Status: Control remains in place.

2. Sinter Plant Rule

Regulatory Basis: 326 IAC 8-13

Implementation Status: Control remains in place.

3. Municipal Solid Waste Landfill

Regulatory Basis: State rule based on the federal New Source Performance Standards for new and existing sources (326 IAC 8-8 and 326 IAC 8-8.1)

Implementation Status: Control remains in place.

2005 Nine Percent Rate of Progress (ROP) Plan

Since there were surplus emission reductions from previous plans, no emission reductions were necessary to meet the additional 9% reduction in VOC emissions for the 2005 ROP. However, the plan includes a federal regulation that will further reduce the amount of VOCs emitted by non-road small engine sources. The measure includes the following:

1. Further Reductions from Federal Controls on Small Spark-ignited Engines

Regulatory Basis: Federal Standards for small spark-ignited engines; 40CFR Part 90

Implementation Status: Control remains in place.

2007 Six Percent Rate of Progress (ROP) Plan

Indiana's 2007 six percent ROP plan consists of several federal regulations and some measures specific to Indiana, including state rules and negotiated agreements. The reductions included measures that control the VOC emissions from petroleum refineries, non-road mobile sources, volatile organic liquid storage operations, cold cleaning degreasing operations, and the reformulation of commercial and consumer products. The measures included the following:

1. Further Reductions from Federal Controls on Small Spark-ignited Engines

Regulatory Basis: Court-ordered standards for small spark-ignited engines; 40 CFR Part 90

Implementation Status: Control remains in place.

2. Commercial/Consumer Solvent Reformulation Rule

Regulatory Basis: Clean Air Act Amendments of 1990; Federal Rule 60 FR 15264

Implementation Status: Control remains in place.

3. Petroleum Refineries NESHAP

Regulatory Basis: Clean Air Act Amendments of 1990

Implementation Status: Control remains in place.

4. United States Steel Agreed Order with IDEM (March 1996)

Control Method: Halts the use of untreated water for quenching (NESHAP-Post ROP)).

Implementation Status: Control remains in place.

5. Volatile Organic Liquid Storage RACT

Regulatory Basis: 326 IAC 8-9

Implementation Status: Control remains in place.

6. Cold Cleaners

Regulatory Basis: 326 IAC 8-3-8

Implementation Status: Control remains in place.

6.3 Nitrogen Oxides (NO_x) Rule

The U.S. EPA NO_x SIP Call required twenty-two (22) states to adopt rules that would result in significant emission reductions from large EGUs, industrial boilers, and cement kilns in the eastern United States. Indiana adopted this rule in 2001. Beginning in 2004, this rule accounted for a reduction of approximately thirty-three percent (33%) of all NO_x emissions statewide from affected sources compared to the previous year (2003), and more than fifty-five percent (55%) compared from 1999 levels.

Twenty-one other states have also adopted these rules. The result is that significant reductions will occur upwind and within the nonattainment area because of the number affected units within the region. From Graphs 4.3 and 4.4 it can be seen that emissions covered by this program have been trending downward since 1998. Table 6.1, compiled from data taken from the U.S. EPA Clean Air Markets website, quantifies the gradual NO_x reductions that have occurred in Indiana as a result of Title IV of the Clean Air Act Amendments and the beginning of the NO_x SIP Call Rule. This cap will stay in place through 2008, at which time the CAIR program will supersede it. The 2015 and beyond CAIR cap represents a forty-one percent (41%) reduction compared to 2004 emission levels.

Further, U.S. EPA has recently published Phase II of the NO_x SIP Call that establishes a budget for large (greater than 1 ton per day emissions) stationary internal combustion engines. This rule will decrease emissions statewide from natural compressor gas stations by 4,263 tons during the ozone season. This rule became effective on February 26, 2006 and will be implemented in 2007.

TABLE 6.1 Trends in EGU Ozone Season NO_x Emissions Statewide in Indiana

Statewide Trends	
Year	**NOx Emissions - tons/ozone season**
1997	152,834
1998	159,931
1999	149,827
2000	133,881
2001	136,052
2002	113,996
2003	99,283
2004	66,568
2005	55,486
Cap 2004-2015	43,654
2015 and Beyond	39,273

6.4 Measures Beyond Clean Air Act Requirements

Reductions in ozone precursor emissions have occurred, or are anticipated to occur, as a result of local and federal control programs. These additional control measures include:

Tier II Emission Standards for Vehicles and Gasoline Sulfur Standards

In February 2000, U.S. EPA finalized a federal rule to significantly reduce emissions from cars and light trucks, including sport utility vehicles (SUVs). Under this proposal, automakers will be required to sell cleaner cars, and refineries will be required to make cleaner, lower sulfur gasoline. This rule will apply nationwide. The federal rules will phase in between 2004 and 2009. U.S. EPA has estimated that NO_x emission reductions will be approximately seventy-seven percent (77%) for passenger cars, eighty-six percent (86%) for smaller SUVs, light trucks, and minivans, and sixty-five to ninety-five percent (65-95%) reductions for larger SUVs, vans, and heavier trucks. VOC emission reductions will be approximately twelve percent (12%) for passenger cars, eighteen percent (18%) for smaller SUVs, light trucks, and minivans, and fifteen percent (15%) for larger SUVs, vans, and heavier trucks.

Heavy-Duty Diesel Engines

In July 2000, U.S. EPA issued a final rule for Highway Heavy Duty Engines, a program that includes low-sulfur diesel fuel standards, and will be phased in from 2004 through 2007. This rule applies to heavy-duty gasoline and diesel trucks and buses. This rule will result in a forty percent (40%) reduction in NO_x from diesel trucks and buses, a large sector of the mobile sources NO_x inventory.

Clean Air Nonroad Diesel Rule

In May 2004, U.S. EPA issued the Clean Air Nonroad Diesel Rule. This rule applies to diesel engines used in industries such as construction, agriculture, and mining. It also contains a cleaner fuel standard similar to the highway diesel

program. The new standards will cut emissions from nonroad diesel engines by over ninety percent (90%). Nonroad diesel equipment, as described in this rule, currently accounts for forty-seven percent (47%) of diesel particulate matter (PM) and twenty-five percent (25%) of nitrogen oxides (NO_x) from mobile sources nationwide. Sulfur levels will be reduced in nonroad diesel fuel by ninety-nine percent (99%) from current levels, from approximately three-thousand (3,000) parts per million (ppm) now to (fifteen) 15 ppm in 2010. New engine standards take effect, based on engine horsepower, starting in 2008.

Together, these rules will substantially reduce local and regional sources of ozone precursors. The modeling analyses discussed in Section 7 include these rules and show the expected ozone concentrations expected to result from their implementation.

6.5 Controls to Remain in Effect

Indiana commits to maintaining the aforementioned control measures after redesignation. Indiana hereby commits that any changes to its rules or emission limits applicable to VOC and/or NO_x sources, as required for maintenance of the ozone standard in Lake and Porter counties, will be submitted to U.S. EPA for approval as a SIP revision.

Indiana, through IDEM's Office of Air Quality and its Office of Enforcement, has the legal authority and necessary resources to actively enforce any violations of its rules or permit provisions. After redesignation, it intends to continue enforcing all rules that relate to the emission of ozone precursors in Lake and Porter counties.

6.6 New Source Review Provisions

Indiana has a long standing and fully implemented New Source Review (NSR) program that is outlined in rule 326 IAC 2. The rule includes the Prevention of Significant Deterioration (PSD) permitting program in 326 IAC 2-2. Indiana's PSD program was conditionally approved on March 3, 2003 (68 FR 9892) and received final approval on May 20, 2004 (69 FR 29071) by U.S. EPA as part of the SIP.

Any facility that is not listed in the 2002 emission inventory, or for the closing of which credit was taken in demonstrating attainment, will not be allowed to construct, reopen, modify, or reconstruct without meeting all applicable permit rule requirement. The review process will be identical to that used for new sources. Once the area is redesignated, OAQ will implement NSR for major sources through the PSD program, which requires an air quality analysis to evaluate whether the new source will threaten the NAAQS.

7.0 MODELING and METEOROLOGY

7.1 Summary of Modeling Results for National Emission Control Strategies in Final Rulemakings

Although U.S. EPA's redesignation guidance does not require modeling for ozone nonattainment areas seeking redesignation, extensive modeling has been performed covering the Northwest Indiana region to determine the effect of national emission control strategies on ozone levels. These modeling analyses determined that Lake and Porter counties were significantly impacted by ozone and ozone precursor transport, and regional NO_x reductions have helped the area attain the 8-hour standard in this area.

7.2 U.S. EPA Modeling Analysis for HDE Final Rulemaking

U.S. EPA conducted modeling for Tier II vehicles and low-sulfur fuels. This analysis was performed in 2000 to support final rulemaking for the Heavy Duty Engine (HDE) and Vehicle Standards and Highway Diesel Fuel and its expected impact on ozone levels. "Technical Support Document for the Heavy Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements: Air Quality Modeling Analyses" (EPA420-R-00-028) was referenced for support of this ozone redesignation for the two counties. Base year emissions from 1996 were modeled for three ozone episodes: June 12-24, 1995; July 5-15, 1995; and August 7-21, 1995. Results of this modeling show that ozone impacts from these fuel emission control measures, as well as the NO_x SIP Call, would be substantial in Lake and Porter counties. Relative Reduction Factors (RRF) were calculated for each monitor in Lake and Porter counties for future years 2007 and 2020. IDEM has applied these RRFs to the three-year (2003-2005) design values of .078 ppm in Lake County and .079 ppm in Porter County. The resulting future year design values for 2007 and 2020 were calculated and shown below in Table 7.1. The 2007 modeled future year design values for all monitors in Lake and Porter counties are in attainment of the 8-hour ozone NAAQS of .085 ppm.

Table 7.1 - Modeling Results: U.S. EPA HDE Rulemaking for Lake/Porter Counties

Monitor ID	Monitor Name	County	Design Value 2003-2005	Modeled Relative Reduction Factor (RRFs)	Future Design Value	Modeled Relative Reduction Factor (RRFs)	Future Design Value
				2007 Base	2007	2020 Base	2020
180890022	Gary	Lake	.076	0.9042	.069	0.8940	.068
180892008	Hammond	Lake	.078	0.9049	.071	0.9015	.070
181270024	Ogden Dunes	Porter	.079	0.9042	.071	0.8940	.071
181270026	Valparaiso	Porter	.077	0.9246	.071	0.9113	.070

7.3 LADCO Modeling Analysis for 8-Hour Ozone Standard Assessment

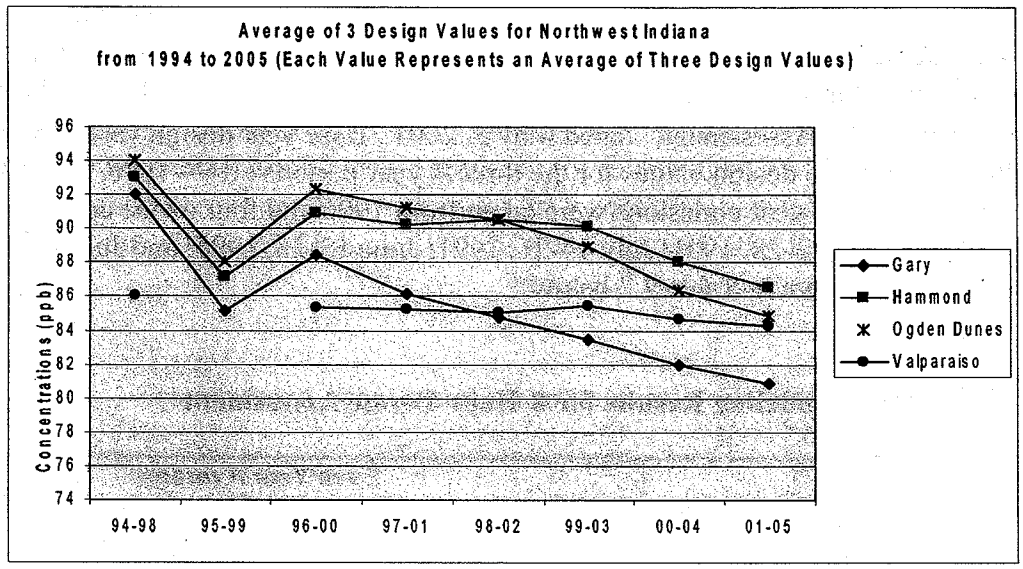
The Lake Michigan Air Directors Consortium (LADCO) performed modeling to evaluate the effect of the NO_x SIP Call and Tier II / Low Sulfur rule for future-year 2007 ozone in the Lake Michigan area. This modeling was originally designed to assess the 1-hour ozone standard. Further analysis was conducted and documented in LADCO's White Paper "8-Hour Ozone Assessment," dated May 2, 2001. Base year design values used were the average of the design values for the three 3-year periods (1994-1996, 1995-1997, and 1996-1998). Base year emissions were taken from 1996 and four ozone episodes were evaluated: June 22-28, 1991; July 14-21, 1991; June 13-25, 1995; and July 7-18, 1995. Results are shown in Table 7.2 below.

Table 7.2 LADCO Modeling Results for 8-Hour Ozone Assessment

Monitor ID	Monitor Name	County	Base Year Average Design Value (ppb)	Future Year Design Value
			'94-'96, '95-'97, '96-'98	2007
180890022	Gary	Lake	.092	.084
180892008	Hammond	Lake	.093	.085
180890024	Lowell	Lake	.087	.079
181270024	Ogden Dunes	Porter	.094	.085
181270026	Valparaiso	Porter	.086	.078
181270020	Natl. Lakeshore	Porter	.090	.082

The resulting future year design values were calculated at .085 ppm for both Hammond in Lake County and for Ogden Dunes, in Porter County. Base-year average design values (1994-1996, 1995-1997, 1996-1998) used in the LADCO modeling were .005 to .010 ppm greater than current base-year average design values (2001-2003, 2002-2004, 2003-2005) for most monitors. Therefore, the modeling results would be lower if the current base year average design values were used. Graph 7.1 below shows a comparison of the three base-year average design values over the past eleven years. Each value represents an average of three design values (i.e., 1994-1998 value derives from the average of the design values from 1994-1996, 1995-1997, and 1996-1998). The trend for the design values at all monitors has dropped over this time period.

Graph 7.1 - Comparison of Design Values from 1994 through 2005



It should be noted that this modeling was conducted in the year 2000 and used 1996 emission inventories. More recent modeling uses updated emissions inventories from 2002 with revised growth factors and control reductions for future year modeling purposes as well as photochemical modeling updates that better characterize ozone formation and transport. These factors also account for the differences between the older modeling results and current modeling for the NO_x SIP Call and CAIR.

7.4 U.S. EPA Modeling for Clean Air Interstate Rule (CAIR), 2005

On March 10, 2005, the U.S. EPA finalized the Clean Air Interstate Rule (CAIR). NO_x emissions from power plants will be cut by 1.7 million tons by 2009 and emissions will be reduced by 1.3 million tons in 2015 in 28 eastern states and the District of Columbia. Compared to a 2003 baseline, Indiana will reduce NO_x emissions by 113,000 tons by 2009 and 149,000 tons by 2015. U.S. EPA performed modeling to support the associated emission reductions. The modeling was based on 1999 – 2003 design values (1999-2001, 2000-2002, 2001-2003). Future year modeling was conducted, including for Lake and Porter counties, and the future year design values for 2010 and 2015 were evaluated for attainment of the 8-hour ozone NAAQS, as shown below in Table 7.3. Results of the CAIR modeling show that both counties will attain the 8-hour ozone NAAQS in 2010 with modeled concentrations below .085 ppm. With further reductions projected in CAIR for 2015, all design values continue to decrease and maintain the 8-hour ozone NAAQS.

Table 7.3 Modeling Results from U.S. EPA for the Clean Air Interstate Rule

County	MSA/CMSA	Design Value (ppm)	Future Design Value	Future Design Value
		1999-2003	2010 with CAIR	2015 with CAIR
Lake	Hammond	.091	.083	.081
Porter	Ogden Dunes	.089	.081	.079

7.5 LADCO Round 4 Modeling for 8-Hour Ozone Standard

LADCO recently performed updated CAMx modeling for ozone, referred to as "Round 4", which uses the most recent emissions inventories and model updates. This modeling was performed to support attainment demonstrations for the five-state LADCO region. The ozone modeling metrics for bias, error, fractional bias, and fractional error met U.S. EPA modeling guidance performance criteria. The base-year design value for attainment purposes was calculated from the periods 2000 - 2002, 2001 - 2003, and 2002 - 2004.

Round 4 modeling included several scenarios for attaining the ozone NAAQS. One scenario included the implementation of "on-the-books" controls for future years such as U.S. EPA motor vehicle and fuel standards and the Clean Air Interstate Rule (CAIR). The future years modeled were 2009 and 2012. Since Indiana is developing a rule to implement CAIR using the U.S. EPA model rule language, this scenario will closely match controls in place during those dates.

One site in Lake and Porter counties modeled above the NAAQS and was used in charts containing modeling results to show the impact of the various scenarios. This is the Hammond CAAP site, 1808920081. The design value for the base period was .088 ppm and modeled results for 2009 came to .087 ppm and .086 ppm for 2012. The Relative Reduction Factor (RRF) for those years was 0.981 for 2009 and 0.977 for 2012. The RRF is calculated to account for the fact that the modeling does not always exactly reproduce the base-year values. By comparing the modeled base-year value to the value obtained after a specific reduction strategy, a relative comparison of the two values is provided. The actual monitored design value is then multiplied by the RRF to approximate the impact of the strategy upon ambient air quality. This technique is part of U.S. EPA attainment modeling guidance for the 8-hour standard.
While the RRF is normally applied to support attainment demonstrations (Attainment SIPs), in this petition, it provides information about ozone trends for the area and supports a demonstration of continued maintenance of the ozone standard in future years. Round 4 used the .088 ppm design value (average of three design values over a five-year period), however, in recent years, the design values for monitors located in Lake and Porter counties have fallen below .085 ppm. The use of design value data for a five-year period is not appropriate to demonstrate continued maintenance, especially since the average of three design values is not representative of the base year for the maintenance plan (2004) and fails to account for emission reductions that led to the area's attainment of the standard. Therefore, for purposes of demonstrating maintenance, it is more appropriate to apply the RRFs to the base-year associated with the maintenance plan

(2004). The base-year of 2004 was chosen in part because it represents the center of the 2003-2005 design value (.078 ppm for the Hammond site). Applying RRFs of 0.981 (2009) and 0.977 (2012) to the current design value of .078 ppm demonstrates a continued downward trend in ozone concentrations, with a projected design value of .076 ppm in 2009 and 2012. The table below illustrates the results of this exercise for three monitor sites in Lake and Porter counties. The Whiting site is not included because it has not been in service for three complete ozone seasons. The Valparaiso site was not included in Round 4 analysis (no RRF available) because its values have traditionally been well below those of the other sites in Lake and Porter counties.

Table 7.4 Application of Round 4 RRFs to Base-Year Design Values

		County	2003-2005 Base DV	2009 RRF	2009 Future DV	2012 RRF	2012 Future DV
1808900221	Gary	Lake	.076	0.955	.073	0.946	.072
1808920081	Hammond	Lake	.078	0.980	.076	0.977	.076
1812700261	Ogden Dunes	Porter	.079	0.959	.076	0.949	.075

7.6 Summary of Existing Modeling Results

U.S. EPA and LADCO modeling shows that existing national emission control measures have brought Lake and Porter counties into attainment of the 8-hour ozone NAAQS. Rulemakings to be implemented in the next several years will provide even greater assurance that air quality will continue to meet the standard into the future. Modeling support for the NO_x SIP Call, Heavy Duty Engine and Highway Diesel Fuel and Tier II/Low Sulfur Fuel and Clean Air Interstate Rule has shown that future year design values for Lake and Porter counties will attain the ozone standard with modeled future year design values below .085 ppm. U.S. EPA has modeled base case future years with existing emission controls only and shown that Lake and Porter Counties will attain the 8-hour ozone NAAQS without proposed additional national emission control strategies. The application of the most current relative reduction factors from LADCO's Round 4 modeling demonstrates that the area will continue to attain the standard into the future. Future national and local emission control strategies would ensure that each county's attainment will be maintained with an increasing margin of safety over time.

7.7 Culpability Analysis

Although U.S. EPA's redesignation guidance does not require a downwind culpability analysis, Indiana conducted photochemical modeling for ozone in order to determine the impacts of Lake and Porter County sources on surrounding states' ozone monitors in the Lake Michigan area. IDEM found that these emissions do not have a significant impact on ozone formation in other nonattainment areas.

Model Inputs and Methodology

Indiana conducts photochemical modeling for ozone and fine particulate matter (PM2.5) in conjunction with the Lake Michigan Air Directors Consortium (LADCO). This consortium consists of Indiana, Illinois, Michigan, Ohio, and Wisconsin. The photochemical model used by Indiana is the Comprehensive Air Quality Model with extensions (CAMx version 4.3), developed by Environ. This model has been accepted by U.S. EPA as an approved air quality model for regulatory analysis and attainment demonstrations. Requirements of 40 CFR 51.112 as well as the "Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-hour Ozone NAAQS" (EPA-454/R-05-002, Oct. 2005) are satisfied with the use of CAMx for attainment demonstrations.

The CAMx model simulates air quality over the eastern two thirds of the United States. CAMx replicates meteorology and emissions that may influence air quality over the MRPO states. Thirty-six (36) kilometer grid cells are placed over the area and emissions and meteorological data are assigned to each grid cell in order to duplicate conditions present during an observed ozone or PM2.5 episode. A grid of 12 kilometer grid cells is placed over the 36 km grid over LADCO and surrounding states in order to refine the meteorology and emissions data. The intent of a more refined grid scale from 36 km to 12 km is to more accurately predict ozone concentrations regionally and therefore assess the effectiveness of regional and local emissions controls.

The meteorology used for Indiana's modeling is the summer of 2002, during which ozone readings were high and, at most Indiana ozone monitors, exceeded the 8-hour ozone NAAQS. The meteorology includes surface temperatures, winds, humidity, rain, clouds and pressure as well as temperatures, winds and mixing heights in the upper atmosphere.

The model simulates the transport and reactivity of a wide variety of inert and chemically active pollutants, including ozone, particulate matter, inorganic and organic PM2.5, nitrogen oxides (NOx) and volatile organic compounds (VOCs), with inputs of anthropogenic and biogenic (naturally occurring) emissions. Anthropogenic emissions are taken from the 2002 National Emission Inventory (NEI); mobile emissions are taken from MOBILE6, NONROAD 2004 and emissions projections. Biogenic emissions are estimated with EMS-2003 using the BEIS3 model as well as BELD3 land use speciation information. The modeling conducted for Lake and Porter Counties is based on the latest emissions information including Base K emissions that LADCO used to conduct its Round 4 modeling analyses (April 2006). Modeling included future emission projections and growth for future year 2009 as well as emissions reductions anticipated in 2009 from the Clean Air Interstate Rule (CAIR) and U. S. EPA motor vehicle and fuel standards.

Source Apportionment

CAMx contains a variety of source apportionment capabilities that can aid in assessing regional and emission sector contributions to ozone formation within the modeled area. Ozone Source Apportionment Tool (OSAT) is used to provide region and emission group information in order to determine contributions to ozone concentrations in areas that do

not attain the 8-hour ozone NAAQS. Seven region-specific areas were modeled with Lake and Porter Counties representing one region. Seven emission groups were modeled, including biogenics, area sources (nonroad, marine/air/rail, other), onroad (motor vehicles or motv), EGUs (electric generating stations) and non-EGUs (industrial boilers, etc). CAMx tracks the emissions of these emission groups and the regions in which they are located to determine the impact on ozone concentrations at each ozone monitor in the LADCO region. Indiana's analysis considered only the higher modeled ozone days (ozone concentrations $\geq$ .070 parts per million) and averaged the impacts from those days.

Model Results

The results shown below are the ozone impact of each emission group for Lake and Porter counties on monitors located along Lake Michigan in Illinois, Michigan and Wisconsin.

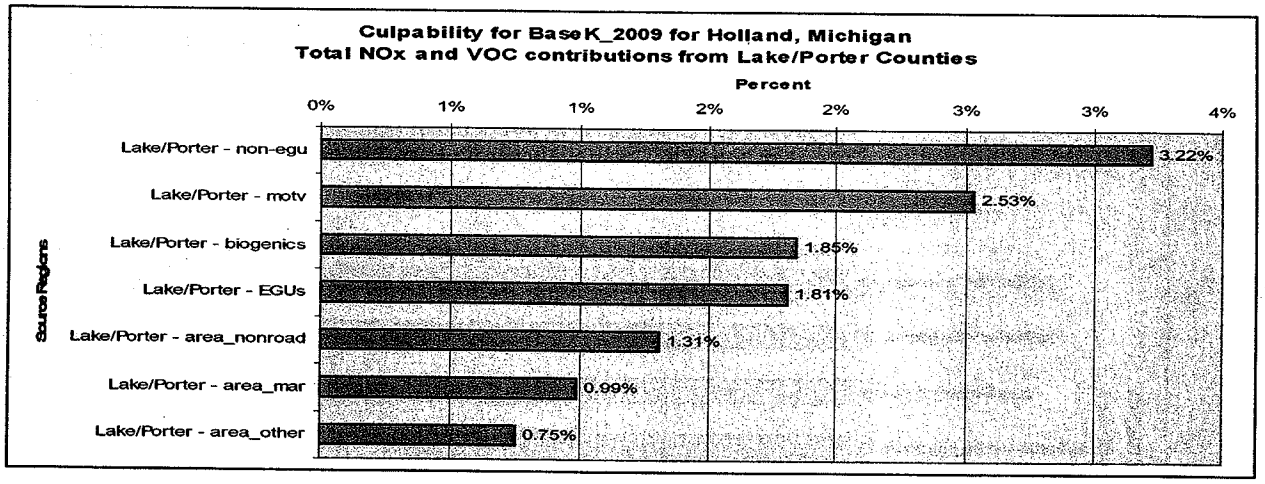
Table 7.5 Lake and Porter Counties Ozone Impacts in parts per million (ppm)

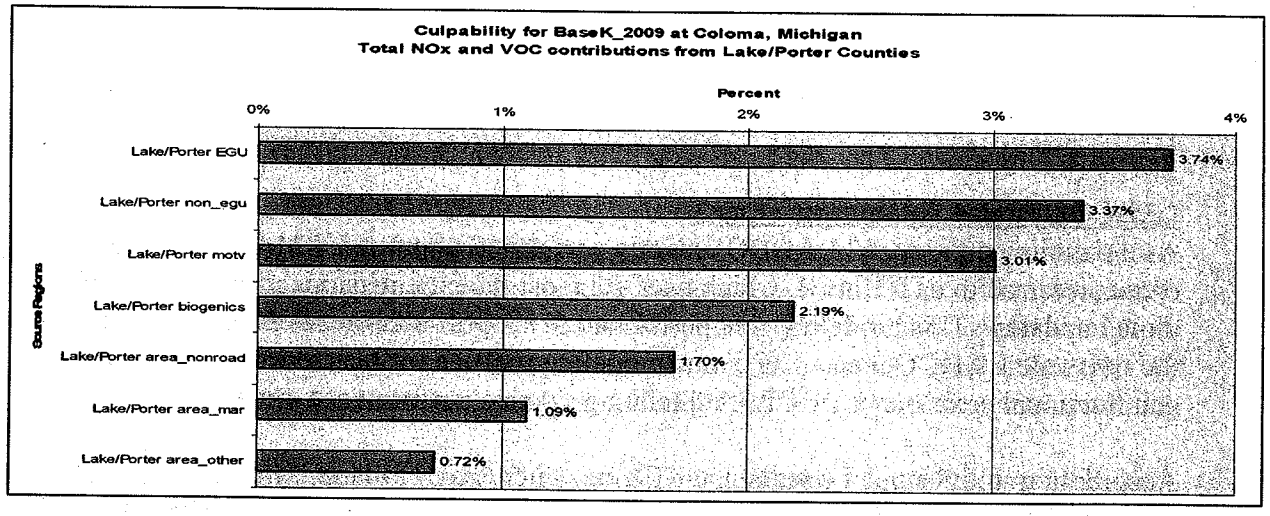
	Emissions Groups						
Ozone Monitor/ ID Number	**Area_other**	**Non-EGU**	**Nonroad**	**Motv**	**EGU**	**Area_mar**	**Total**
Cheltenham, IL 170310032	.0011	.0039	.0023	.0034	.0016	.0011	.0134
Northbrook, IL 170314201	.0010	.0017	.0019	.0016	.0006	.0004	.0072
Evanston, IL 170317002	.0011	.0018	.0018	.0018	.0005	.0005	.0075
IL Beach , IL 170971007	.0008	.0019	.0013	.0017	.0005	.0005	.0067
Holland, MI 260050003	.0006	.0029	.0012	.0023	.0016	.0009	.0095
Coloma, MI 260210014	.0006	.0026	.0013	.0024	.0028	.0009	.0106
Chiwaukee, WI 550590019	.0006	.0018	.0010	.0016	.0005	.0005	.0060
S. Milwaukee, WI 550791025	.0009	.0024	.0014	.0020	.0007	.0007	.0081

These results show the contributions of Lake and Porter counties' emissions to ozone formation and their significance to each area. Each emission group's impact at each ozone monitor is listed, and the highest total ozone impacts are at Cheltenham, Illinois, Coloma, Michigan, and Holland, Michigan. The Lake and Porter Counties' emission groups with the highest ozone impacts on surrounding ozone monitors are the non-EGU, motor vehicle and non-road groups.

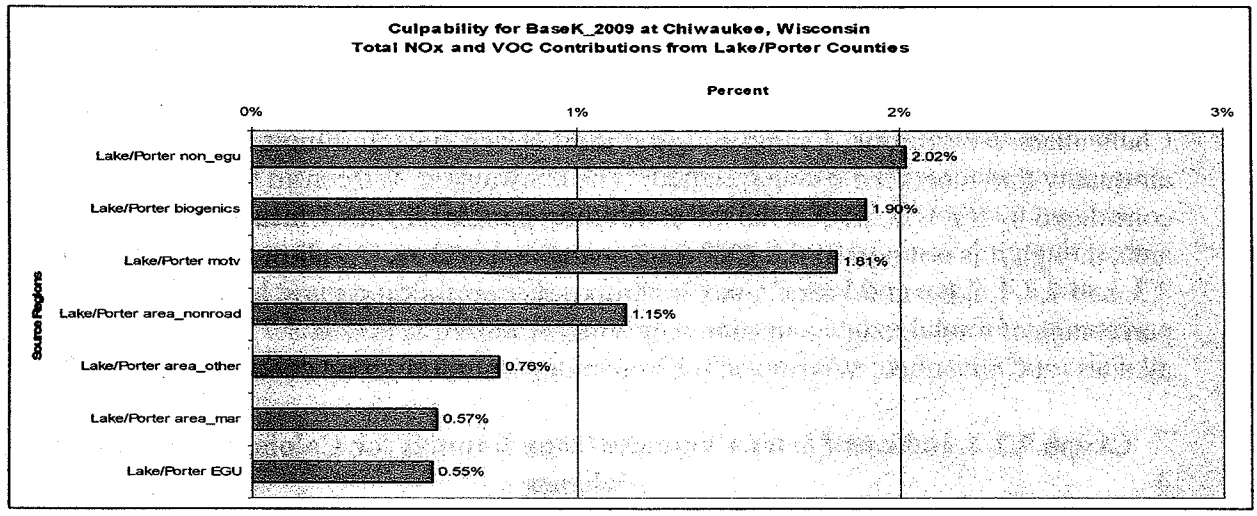
In order to put these ppm impacts into perspective, the following charts show the average NO_x and VOC contributions from Lake and Porter County emission groups on four separate monitors. Holland, Michigan, Coloma, Michigan, Chiwaukee, Wisconsin, and South Milwaukee, Wisconsin are the monitor sites that emissions for Lake and Porter counties impact the most outside of the Chicago nonattainment area (note that the Cheltenham, Northbrook, Evanston, and Illinois Beach sites in Illinois already measure air quality that meets the ozone standard). The Chiwaukee, Wisconsin site has been considered by the U.S. EPA to be the controlling monitor for the Chicago nonattainment area, though it is not part of the Chicago nonattainment area. As shown in Graphs 7.2, 7.3, and 7.4, Lake and Porter County anthropogenic emission groups, based on the percentage of total ozone, contribute only small amounts, less than 3.7 % for any group at all sites (at Chiwaukee, Wisconsin, the maximum emission group contribution is 2%).

Graph 7.2 Lake and Porter Counties Ozone Impacts for Coloma and Holland, Michigan

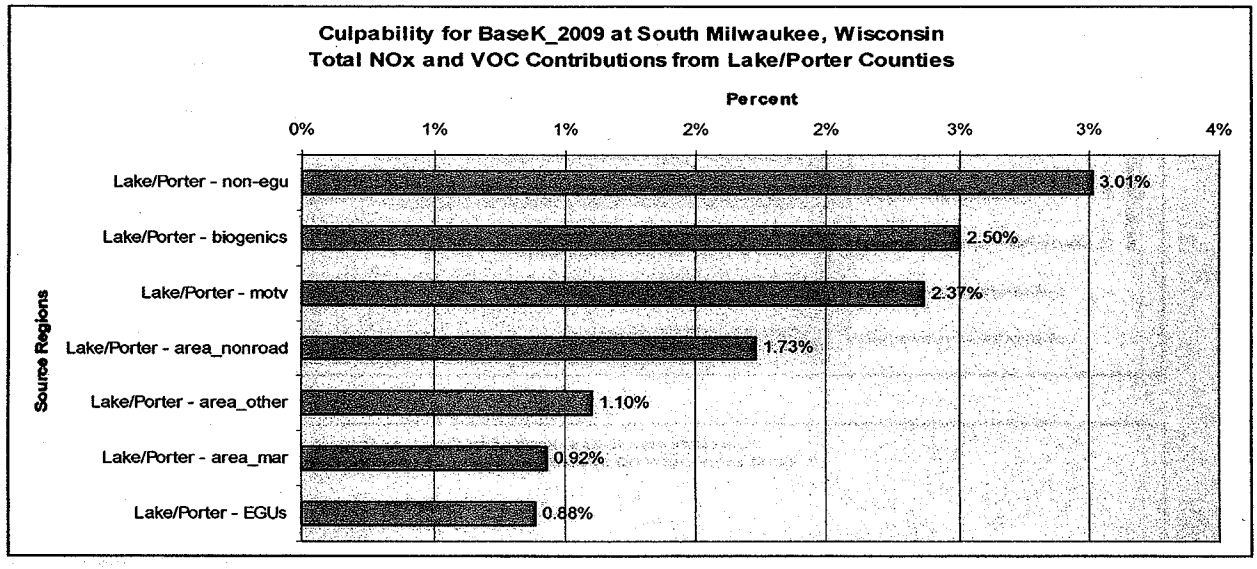




Graph 7.3 Lake and Porter Counties Ozone Impacts for Chiwaukee, Wisconsin



Graph 7.4 Lake and Porter Counties Ozone Impacts for South Milwaukee, Wisconsin



LADCO Round 4 Attainment Tests

As mentioned previously, LADCO recently performed updated CAMx modeling for ozone, referred to as Round 4, which uses the most recent emissions inventories and model updates. This modeling was performed to support attainment demonstrations for the five state LADCO area. The ozone modeling metrics for bias, error, fractional bias, and fractional error met U.S. EPA modeling guidance performance criteria.

According to the Round 4 results, the Coloma, Michigan, Holland, Michigan and South Milwaukee, Wisconsin sites are projected to attain the standard in 2009 without additional controls. The results from Round 4 for the sites discussed above are outlined below. The Chiwaukee, Wisconsin site is projected to be above the standard in 2009.

However, the base year design value used in Round 4 modeling for the site is .098 ppm, based on the average of the 2000-2004 design values (2000-2002, 2001-2003, and 2002-2004). The 2003-2005 design value for the Chiwaukee, Wisconsin site is .086 ppm, much lower than the base year design value used for Round 4 attainment tests. IDEM's analysis indicates that the contributions from Lake and Porter counties to the Chiwaukee, Wisconsin site are insignificant (only 6% of the total projected concentrations and no more than 2% of the total anthropogenic emissions derive from a specific Lake and Porter County emission group).

TABLE 7.6
Projected 2009 Design Value With CAIR-Full Trading
(Parts per Million)

Coloma, MI 260210014	.0792
Holland, MI 260050003	.0834
S. Milwaukee, WI 550791025	.0849
Chiwaukee, WI 550590019	.0920

Conclusions

Indiana conducted photochemical modeling in order to determine the impacts on ozone formation on surrounding states' ozone monitors in the Lake Michigan area. Furthermore, Indiana has evaluated whether emissions from Lake and Porter counties are likely to affect a downwind area's ability to attain the 8-hour ozone standard. Of the downwind sites evaluated, the Chiwaukee, Wisconsin site (550590019) is the only site that has not already attained the standard, or is not projected to attain the standard without beyond-CAIR controls. However, the contribution from Lake and Porter counties to the Chiwaukee, Wisconsin site equates to only 6.5% (.0060 ppm divided by .092 ppm) of the projected total ozone concentrations for 2009. Furthermore, no anthropogenic emission group for Lake and Porter counties contributes more than 2% to the total projected ozone concentration for the Chiwaukee, Wisconsin site.

Lake and Porter counties are currently subject to a stringent set of control measures. Such measures include reformulated gasoline, enhanced vehicle inspection and maintenance, stage II vapor recovery, and an array or controls specific to area and point sources within the two counties. Indiana is committing to keep all of these and the additional measures referenced in Section 6 of this document in place. Based on the level of existing controls on anthropogenic emission groups, and the insignificant impact of these emission groups on the Chilwaukee, Wisconsin site, the redesignation of Lake and Porter counties to attainment will not adversely affect any downwind area's ability to attain the standard.

7.8 Temperature Analysis for Lake and Porter County

Meteorological conditions are one of the most important factors that influence ozone development and transport. A temperature analysis has been conducted to determine how the temperatures during the ozone conducive months of April, May, June, July, August, September and October compare to normal temperatures for the Northwest Indiana area for the years 1971 through 2000. Temperature information was taken from the National Weather Service Station at O'Hare International Airport in Chicago, Illinois and meteorological stations at Lowell, Lake County and Porter County Municipal Airport. Available normal maximum temperatures by summer months from 1971-2000 for the Northwest Indiana/ Chicago, Illinois area are as follows:

May – 69.9° F
June – 79.2° F
July – 83.5° F
August – 81.2° F
September – 73.9° F
May - September – 77.5° F

Monthly maximum temperatures for the previous 8 years (1998 – 2005) during the summer months are compared to normal summer month temperatures in Table 7.5. Overall, the temperatures during the 1998, 1999, 2001, 2002 and 2005 summer months of May, June, July, August, and September were at normal to 2% above normal while temperatures during the 2000, 2003 and 2004 summer months were 1% to 3% lower than the normal temperatures. Table 7.5 shows the average temperatures in Northwest Indiana for each of the past eight years and the percent difference from normal for each year.

Table 7.7 Analysis of Maximum Temperatures for Lake/Porter Counties

(Percent Change from Maximum Temperature (°F) Normals (1971 – 2000))

	Normal	1998		1999		2000		2001	
	Max	Max	%	Max	%	Max	%	Max	%
May	69.9	75.5	+8	73.5	+5	71.8	+3	71.5	+2
June	79.2	78.1	-1	80	+1	76.8	-3	77.0	-3
July	83.5	81.8	-2	86.7	+4	78.5	-6	82.3	-1
August	81.2	81.2	0	77.6	-4	80.7	-1	82.8	+2
September	73.9	79.4	+7	76.7	+4	74.5	+1	73.2	-1
AVE. May-Sept.	**77.5**	**79.2**	**+2**	**78.9**	**+2**	**76.5**	**-1**	**77.4**	**0**

	Normal	2002		2003		2004		2005	
	Max	Max	%	Max	%	Max	%	Max	%
May	69.9	65.2	-7	65.4	-6	71.3	+2	67.6	-3
June	79.2	81.3	+3	74.5	-6	76.4	-4	82.6	+4
July	83.5	85.9	+3	81.0	-3	79.6	-5	85.0	+2
August	81.2	81.8	+1	82.1	+1	75.1	-8	82.5	+2
September	73.9	79.1	+7	72.1	-2	77.1	+4	79.3	+7
AVE. May-Sept.	**77.5**	**78.7**	**+1**	**75.0**	**-3**	**75.9**	**-2**	**79.4**	**+2**

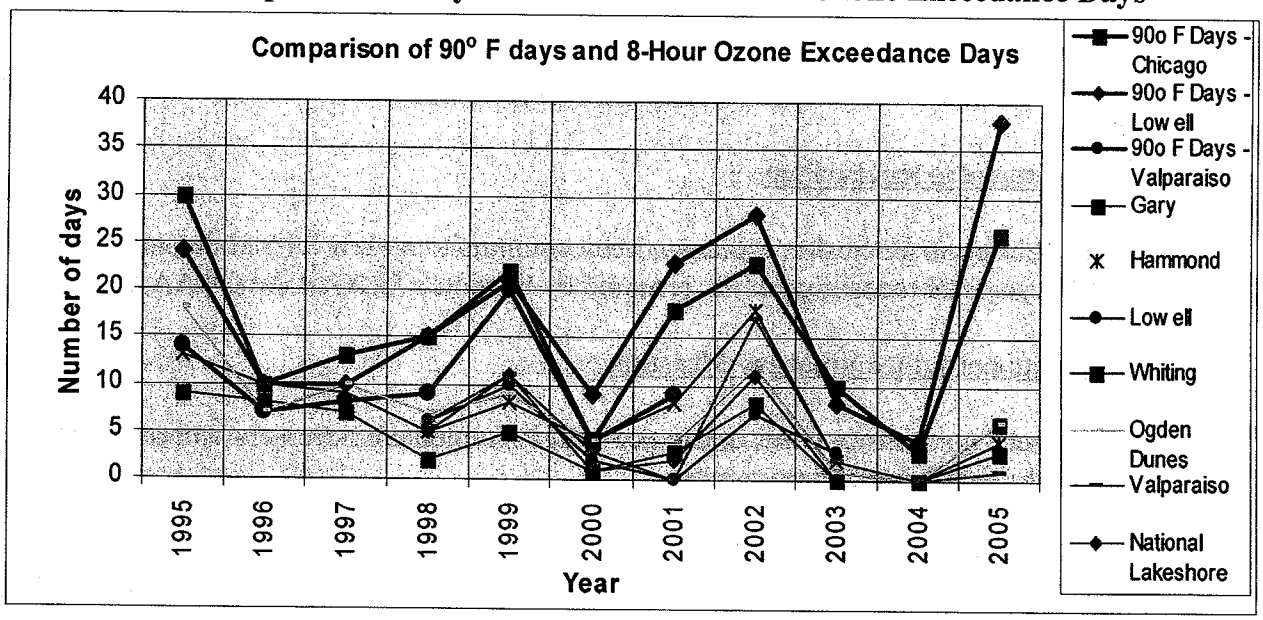
The number of days with temperatures of 90° F and higher were collected from O'Hare National Weather Service Station and Lowell, Lake County and Valparaiso, Porter County meteorological stations and compared to the normal number of days from 1995 through 2005 as well as the number of 8-hour ozone exceedance days. Table 7.6 shows a comparison of 8-hour ozone exceedance days and number of 90° F temperature days while Graph 7.5 shows the correlation graphically.

Table 7.8 - Comparison of Days with 90° F and 8-Hour Ozone Exceedance Days

Number of Days with Temperatures of 90° F and higher													
Site	**County**	**Ave. 90° F Days**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Chicago, IL	Cook Co.	**15.8**	30	10	13	15	22	4	18	23	10	3	26
Lowell	Lake Co.	**17.5**	24	10	10	15	21	9	23	28	8	4	38
Valparaiso	Porter Co.	**9.6**	14	7	8	9	20	4	9	N/A	N/A	N/A	N/A
Number of 8-Hour Exceedance Days at Lake/Porter County area ozone monitors													
Monitor	**County**		**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Gary	Lake		9	8	7	2	5	1	3	8	0	0	6
Hammond	Lake		13	10	9	5	8	4	8	18	2	0	4
Lowell	Lake		N/O	N/O	N/O	6	10	2	0	7	3	N/O	N/O
Whiting	Lake		N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	0	3
Ogden Dunes	Porter		18	7	10	7	9	4	.4	12	1	0	6
Valparaiso	Porter		N/O	N/O	N/O	6	11	3	0	17	2	0	1
National Lakeshore	Porter		N/O	N/O	N/O	5	11	1	2	11	0	N/O	N/O

N/O – Not Operational N/A – Not Available

Graph 7.5 - Comparison of Days with 90° F and 8-Hour Ozone Exceedance Days



As can be seen, a greater number of ozone exceedance days per year correlate with a greater number of 90° F days per year. The effects of national control measures appear to have an impact on the number of ozone exceedance days per year. This is evident in that 2005 had a greater number of days with temperatures of 90° F or more but the number of 8-hour exceedance days was low. While other meteorological factors may have influenced this result to some degree, it appears that the lower emissions helped to keep

the number of 8-hour ozone exceedance days lower during the ozone-conducive conditions of 2005.

7.9 Summary of Meteorological Conditions

The analysis of the departure from normal of the maximum temperatures during the summer months shows variation as illustrated in Table 7.8. The analysis shows that 15 or more days with temperatures of 90° F and higher occurred in 1995, 1998, 1999, 2001, 2002 and 2005. The number of 8-hour ozone exceedance days for those years shows a greater correlation to the number of higher temperature days. However, the years with a lesser number of 90° F days still yielded 8-hour ozone exceedance days. For example, 1996 and 1997 had a fewer than normal amount of 90° F days; however, there were still a significant number of 8-hour ozone exceedances for those years. In comparison, 2003 and 2004 were also cooler years, but due to national emission reduction measures in effect, there were fewer ozone exceedances. Ozone formation in the future will be influenced less by meteorological conditions. Lower ozone values correspond to lowered local and regional ozone precursor emissions despite ozone conducive conditions. The 8-hour standard, expressed as a 4th high ozone value averaged over 3 years, accounts for variations in temperature. Despite such variations, ozone values in Lake and Porter counties have steadily decreased since 1995.

8.0 CORRECTIVE ACTIONS

8.1 Commitment to Revise Plan

As noted in Section 4.6 above, Indiana hereby commits to review its Maintenance Plan eight (8) years after redesignation, as required by Section 175(A) of the CAAA.

8.2 Commitment for Contingency Measures

Indiana hereby commits to adopt and expeditiously implement necessary corrective actions in the following circumstances:

> Warning Level Response:
> A Warning Level Response shall be prompted whenever an annual (1-year) fourth high monitored value of .089 parts per million (ppm) occurs in a single ozone season, or a two (2)-year average fourth high monitored value of .085 ppm or greater occurs within the maintenance area. A Warning Level Response will consist of a study to determine whether the ozone value indicates a trend toward higher ozone values or whether emissions appear to be increasing. The study will evaluate whether the trend, if any, is likely to continue and, if so, the control measures necessary to reverse the trend taking into consideration ease and timing for implementation, as well as economic and social considerations.

Implementation of necessary controls in response to a Warning Level Response trigger will take place as expeditiously as possible, but in no event later than twelve (12) months from the conclusion of the most recent ozone season (September 30).

Should it be determined through the Warning Level study that action is necessary to reverse the noted trend, the procedures for control selection and implementation outlined under "Action Level Response" shall be followed.

Action Level Response

An Action Level Response shall be prompted whenever a three (3)-year average fourth high monitored value of .085 parts per million (ppm) or greater occurs within the maintenance area. In the event that the Action Level is triggered and is not found to be due to an exceptional event, malfunction, or noncompliance with a permit condition or rule requirement, IDEM will determine additional control measures needed to assure future attainment of NAAQS for ozone. In this case, measures that can be implemented in a short time will be selected in order to be in place within eighteen (18) months from the close of the ozone season that prompted the Action Level.

Control Measure Selection and Implementation

Adoption of any additional control measures is subject to the necessary administrative and legal process. This process will include publication of notices, an opportunity for public hearing, and other measures required by Indiana law for rulemaking by state environmental boards.

If a new measure/control is already promulgated and scheduled to be implemented at the federal or state level, and that measure/control is determined to be sufficient to address the upward trend in air quality, additional local measures may be unnecessary. Furthermore, Indiana will submit to U.S. EPA an analysis to demonstrate the proposed measures are adequate to return the area to attainment.

8.3 Contingency Measures

Contingency measures to be considered will be selected from a comprehensive list of measures deemed appropriate and effective at the time the selection is made. Listed below are example measures that may be considered. The selection of measures will be based upon cost-effectiveness, emission reduction potential, economic and social considerations or other factors that IDEM deems appropriate. IDEM will solicit input from all interested and affected persons in the maintenance area prior to selecting appropriate contingency measures. All of the listed contingency measures are potentially effective or proven methods of obtaining significant reductions of ozone precursor emissions. Because it is not possible at this time to determine what control measure will be appropriate at an unspecified time in the future, the list of contingency measures

outlined below is not comprehensive. Indiana anticipates that if contingency measures should ever be necessary, it is unlikely that a significant number (i.e., all those listed below) will be required.

1. Vehicle emissions testing program enhancements (liquid leak inspection, increased weight limit, addition of diesel vehicles, etc.)
2. Asphalt paving (lower VOC formulation)
3. Diesel exhaust retrofits
4. Traffic flow improvements
5. Idle reduction programs
6. Portable fuel container regulation (statewide)
7. Park and ride facilities
8. Rideshare/carpool program
9. VOC cap/trade program for major stationary sources
10. Commercial/consumer solvents (statewide)

No contingency measure shall be implemented without providing the opportunity for full public participation during which the relative costs and benefits of individual measures, at the time they are under consideration, can be fully evaluated.

9.0 PUBLIC PARTICIPATION

Indiana published notification for a public hearing and solicitation for public comment concerning the draft Redesignation Petition and Maintenance Plan in the Gary Post Tribune, Chesterton Tribune, and The Indianapolis Star, Indianapolis, Indiana, on or before May 30, 2006.

A public hearing to receive comments concerning the redesignation request was conducted on June 29, 2006 at the Lake County Public Library, Merrillvile, Indiana and a number of comments were received. The public comment period closed on July 7, 2006. Appendix D includes a copy of the public notice, certifications of publication, the transcript from the public hearing, public hearing attendance record, copies of all written comments received, and a summary of all comments received that includes IDEM's responses, as applicable.

10.0 CONCLUSIONS

Lake and Porter counties, along with the remaining portion of the nonattainment area, have attained the NAAQS standard for ozone. This petition demonstrates that Lake and Porter counties have complied with the applicable provisions of the 1990 Amendments to the Clean Air Act regarding redesignation of ozone nonattainment areas. IDEM has prepared a State Implementation and Maintenance Plan that meets the requirement of Section 110 (a) (1) of the 1990 Clean Air Act.

Indiana has performed an analysis that shows the air quality improvements are due to permanent and enforceable measures and that significant regional NO_x reductions will ensure continued compliance (maintenance) with the standard. Indiana has also demonstrated that the redesignation of Lake and Porter counties will not adversely affect a downwind area's ability to attain the standard. Additionally, Indiana has ensured that all CAA requirements necessary to support redesignation have been met.

Under the previous 1-hour standard, and under the current 8-hour standard for ozone, controls that are more stringent than in any other portion of Indiana have been implemented in Lake and Porter counties. These controls are comparable to those implemented elsewhere within the nonattainment area, despite the fact that Lake and Porter counties only account for about 7% of the total population within the entire nonattainment area. These controls shall remain in effect following redesignation to ensure continued compliance with the standard.

In addition to the corrective actions (should they be necessary) outlined in this submittal, the State of Indiana continues to participate in the regional air quality planning efforts sponsored by LADCO. The current goal of the planning process is to establish a regional control strategy that provides for attainment of the ozone and fine particle standards throughout the states of Illinois, Indiana, Michigan, Ohio, and Wisconsin. Along with the other LADCO states, the State of Indiana is considering the implementation of local and statewide emission control measures, where photochemical modeling and culpability analyses demonstrate a clear need, and cost-effectiveness analyses justify the implementation of such measures.

Based on this presentation, Indiana's portion of the nonattainment area (Lake and Porter counties) meets the requirements for redesignation under the CAA (Section 107 (d)(3)) and U.S. EPA guidance. Furthermore, because this area is subject to transport, additional regional NO_x and VOC reductions will ensure continued compliance (maintenance) with the standards and provide an increased margin of safety.

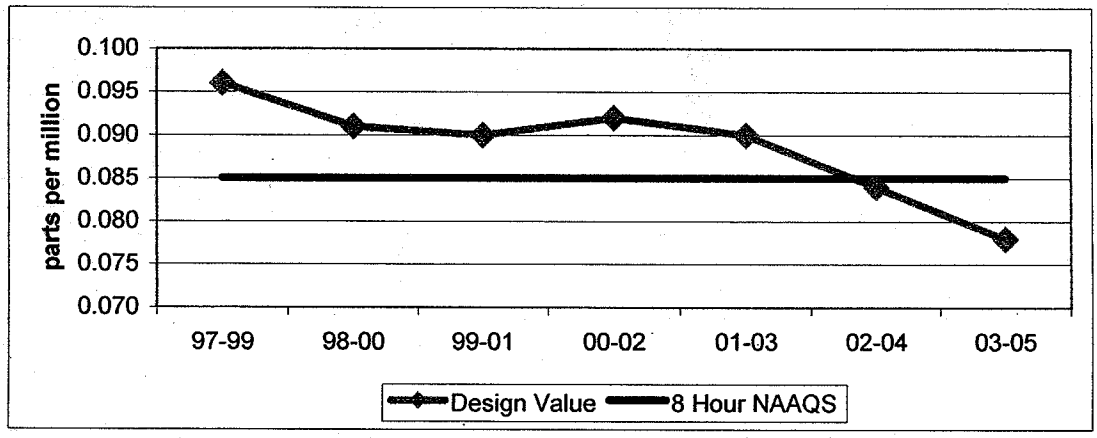
Consistent with the authority granted to the U.S. EPA under Section 107 (d)(3) of the CAA, the State of Indiana hereby requests that Lake and Porter counties be redesignated to attainment simultaneously with U.S. EPA approval of the Indiana State Implementation and Maintenance Plan provisions contained herein.

Local Monitoring (Design Value) Data for Illinois Counties
2003-2005

SITE ID	COUNTY	ADDRESS	YEAR	%OBS	1ST 8-HR	2ND 8-HR	3RD 8-HR	4TH 8-HR	2003-2005 Average
17-001-0006	Adams	732 HAMPSHIRE	2003	98	0.077	0.077	0.071	0.071	
17-001-0006	Adams	732 HAMPSHIRE	2004	99	0.067	0.066	0.064	0.063	
17-001-0006	Adams	732 HAMPSHIRE	2005	100	0.077	0.076	0.076	0.076	0.070
17-019-0004	Champaign	606 E. GROVE	2003	100	0.078	0.077	0.075	0.075	
17-019-0004	Champaign	606 E. GROVE	2004	100	0.066	0.064	0.063	0.062	
17-019-0004	Champaign	606 E. GROVE	2005	100	0.079	0.075	0.073	0.073	0.070
17-023-0001	Clark	WEST UNION	2003	88	0.079	0.077	0.068	0.067	
17-023-0001	Clark	WEST UNION	2004	91	0.064	0.063	0.063	0.062	
17-023-0001	Clark	WEST UNION	2005	94	0.074	0.074	0.073	0.071	0.066
17-031-0001	Cook	4500 W. 123RD ST.	2003	98	0.09	0.08	0.078	0.077	
17-031-0001	Cook	4500 W. 123RD ST.	2004	100	0.075	0.073	0.069	0.065	
17-031-0001	Cook	4500 W. 123RD ST.	2005	100	0.101	0.098	0.088	0.084	0.075
17-031-0032	Cook	3300 E. CHELTENHAM	2003	100	0.087	0.086	0.08	0.08	
17-031-0032	Cook	3300 E. CHELTENHAM	2004	100	0.077	0.072	0.071	0.067	
17-031-0032	Cook	3300 E. CHELTENHAM	2005	100	0.108	0.086	0.077	0.076	0.074
17-031-0042	Cook	WACKER AT ADAMS	2003	67	0.091	0.081	0.079	0.078	
17-031-0042	Cook	WACKER AT ADAMS	2004	64	0.088	0.077	0.073	0.069	
17-031-0042	Cook	WACKER AT ADAMS	2005	51	0.113	0.086	0.083	0.08	0.075
17-031-0050	Cook	103RD AND LUELLA	2003	100	0.073	0.073	0.072	0.069	0.07
17-031-0064	Cook	5720 S. ELLIS AVE	2003	100	0.072	0.069	0.069	0.067	
17-031-0064	Cook	5720 S. ELLIS AVE	2004	100	0.07	0.059	0.057	0.054	
17-031-0064	Cook	5720 S. ELLIS AVE	2005	100	0.097	0.095	0.086	0.084	0.068
17-031-0072	Cook	1000 E. OHIO	2003	98	0.086	0.078	0.075	0.075	
17-031-0072	Cook	1000 E. OHIO	2004	98	0.071	0.068	0.067	0.06	
17-031-0072	Cook	1000 E. OHIO	2005	99	0.096	0.087	0.081	0.081	0.072
17-031-0076	Cook	7801 LAWNDALE	2004	100	0.073	0.07	0.069	0.068	
17-031-0076	Cook	7801 LAWNDALE	2005	100	0.089	0.086	0.084	0.084	0.076
17-031-1003	Cook	6545 W. HURLBUT ST.	2003	99	0.084	0.078	0.077	0.077	
17-031-1003	Cook	6545 W. HURLBUT ST.	2004	99	0.076	0.07	0.069	0.067	
17-031-1003	Cook	6545 W. HURLBUT ST.	2005	98	0.087	0.084	0.083	0.083	0.075
17-031-1601	Cook	729 HOUSTON	2003	97	0.099	0.08	0.076	0.075	
17-031-1601	Cook	729 HOUSTON	2004	94	0.074	0.07	0.068	0.067	
17-031-1601	Cook	729 HOUSTON	2005	100	0.097	0.092	0.087	0.086	0.076
17-031-4002	Cook	1820 S. 51ST AVE.	2003	99	0.075	0.072	0.071	0.07	
17-031-4002	Cook	1820 S. 51ST AVE.	2004	100	0.064	0.062	0.06	0.059	
17-031-4002	Cook	1820 S. 51ST AVE.	2005	100	0.08	0.077	0.075	0.075	0.068
17-031-4007	Cook	9511 W. HARRISON ST	2003	99	0.085	0.075	0.074	0.073	
17-031-4007	Cook	9511 W. HARRISON ST	2004	94	0.072	0.071	0.068	0.064	
17-031-4007	Cook	9511 W. HARRISON ST	2005	99	0.089	0.085	0.082	0.079	0.072
17-031-4201	Cook	750 DUNDEE RD.	2003	98	0.084	0.083	0.081	0.08	
17-031-4201	Cook	750 DUNDEE RD.	2004	97	0.076	0.07	0.069	0.068	
17-031-4201	Cook	750 DUNDEE RD.	2005	99	0.085	0.085	0.085	0.081	0.076
17-031-7002	Cook	531 E. LINCOLN	2003	98	0.091	0.089	0.082	0.082	
17-031-7002	Cook	531 E. LINCOLN	2004	98	0.082	0.08	0.076	0.075	
17-031-7002	Cook	531 E. LINCOLN	2005	96	0.104	0.088	0.083	0.082	0.079
17-043-6001	DuPage	RT. 53	2003	98	0.083	0.069	0.067	0.066	
17-043-6001	DuPage	RT. 53	2004	99	0.07	0.069	0.067	0.065	
17-043-6001	DuPage	RT. 53	2005	98	0.091	0.082	0.08	0.078	0.069
17-049-1001	Effingham	ROUTE 45 SOUTH	2003	100	0.083	0.071	0.07	0.069	
17-049-1001	Effingham	ROUTE 45 SOUTH	2004	96	0.074	0.073	0.067	0.067	
17-049-1001	Effingham	ROUTE 45 SOUTH	2005	100	0.076	0.075	0.073	0.073	0.069
17-065-0001	Hamilton	STATE ROUTE 142, DA	2003	97	0.08	0.079	0.078	0.077	
17-065-0001	Hamilton	STATE ROUTE 142, DA	2004	99	0.072	0.072	0.072	0.071	
17-065-0002	Hamilton	STATE ROUTE 14 WEST	2005	95	0.081	0.081	0.08	0.077	0.075
17-083-1001	Jersey	LIBERTY ST. & COUNT	2003	100	0.095	0.09	0.084	0.083	
17-083-1001	Jersey	LIBERTY ST. & COUNT	2004	100	0.077	0.076	0.075	0.073	
17-083-1001	Jersey	LIBERTY ST. & COUNT	2005	94	0.089	0.087	0.087	0.086	0.080

Historic Design Values

City	Site Name			Three Year 8-hour Design Values						
		95-97	96-98	97-99	98-00	99-01	00-02	01-03	02-04	03-05
Lowell	Sewage Trmt Plant			0.088	0.084	0.080	0.079	0.081	Site discontinued	
Whiting	Whiting HS								0.064	0.076
Hammond	Hammond	0.095	0.090	0.091	0.088	0.090	0.092	0.090	0.083	0.078
Portage	Dunes National Lake Shore		0.090	0.096	0.087	0.085	0.086	0.086	Site discontinued	
Ogden Dunes	Water Trmt Plant	0.096	0.091	0.093	0.091	0.090	0.090	0.087	0.082	0.079
Valparaiso	Water Trmt Plant		0.085	0.088	0.086	0.083	0.086	0.086	0.084	0.077



Fourth Highest Daily Values

SITE ID	COUNTY	ADDRESS	YEAR	%OBS	1ST 8-HR	2ND 8-HR	3RD 8-HR	4TH 8-HR	2003-2005 AVERAGE
18-089-0022	LAKE	GARY	2003	96	0.081	0.080	0.077	0.076	
18-089-0022	LAKE	GARY	2004	100	0.070	0.064	0.064	0.064	
18-089-0022	LAKE	GARY	2005	96	0.101	0.100	0.090	0.089	0.076
18-089-0024	LAKE	LOWELL	2003	98	0.101	0.090	0.088	0.081	site ceased operation in 2003
18-089-0030	LAKE	WHITING	2004	100	0.076	0.068	0.067	0.064	0.076
18-089-0030	LAKE	WHITING	2005	100	0.103	0.092	0.089	0.088	2004-2005 average only; site began operation in 2004
18-089-2008	LAKE	HAMMOND	2003	96	0.088	0.088	0.084	0.081	
18-089-2008	LAKE	HAMMOND	2004	100	0.074	0.069	0.067	0.067	
18-089-2008	LAKE	HAMMOND	2005	99	0.095	0.090	0.089	0.087	0.078
18-127-0020	PORTER	PORTAGE	2003	97	0.081	0.081	0.081	0.079	2003 data only; site ceased operation in 2003
18-127-0024	PORTER	OGDEN DUNES	2003	100	0.086	0.084	0.080	0.077	0.079
18-127-0024	PORTER	OGDEN DUNES	2004	100	0.078	0.077	0.072	0.069	
18-127-0024	PORTER	OGDEN DUNES	2005	99	0.109	0.098	0.091	0.090	
18-127-0026	PORTER	VALPARAISO	2003	100	0.090	0.090	0.082	0.082	0.077
18-127-0026	PORTER	VALPARAISO	2004	100	0.084	0.081	0.077	0.072	
18-127-0026	PORTER	VALPARAISO	2005	100	0.086	0.085	0.083	0.078	

Annual 4th High Values

City	Site Name	Yearly Annual 8-hour Design Values										
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Lowell	Sewage Trmt Plant	Site started 4/98			0.087	0.090	0.075	0.077	0.086	0.084	Site Discontinued	
Whiting	Whiting HS	Site started in January 2004									0.064	0.088
Hammond	Hammond	0.099	0.093	0.094	0.085	0.095	0.086	0.090	0.101	0.081	0.067	0.087
Portage	Dunes National Lake Shore	Site Started in April 1998			0.090	0.102	0.071	0.082	0.097	0.079	Site Discontinued	
Ogden Dunes	Water Trmt Plant	0.103	0.096	0.091	0.087	0.101	0.085	0.085	0.101	0.770	0.069	0.090
Valparaiso	Water Trmt Plant	Site Started in April 1998			0.085	0.091	0.082	0.077	0.100	0.082	0.072	0.078

Appendix A

Aerometric Information Retrieval System (AIRS) Data

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 28, 2005

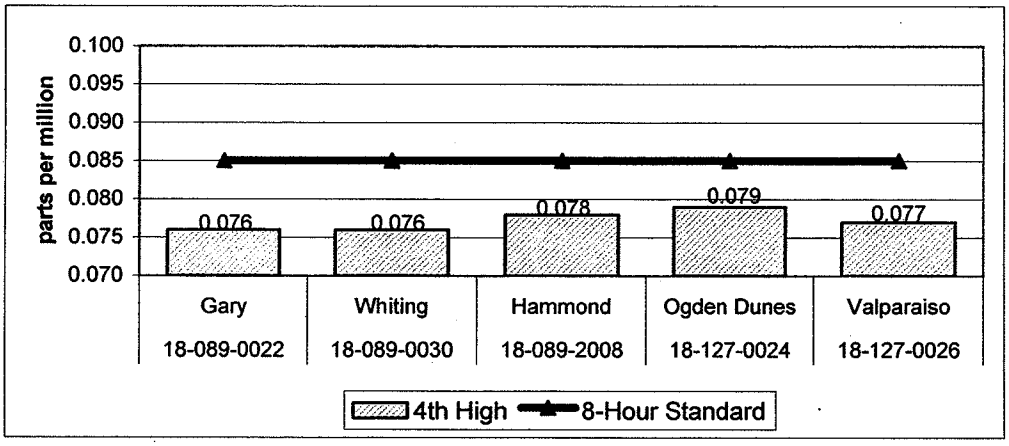
EXCEPTIONAL DATA TYPES

EDT	DESCRIPTION
0	NO EVENTS
1	EVENTS EXCLUDED
2	EVENTS INCLUDED
3	EXCEPTIONAL EVENTS EXCLUDED
4	NATURAL EVENTS EXCLUDED
5	EVENTS WITH CONCURRENCE EXCLUDED
6	EXCEPTIONAL EVENTS WITH CONCURRENCE EXCLUDED
7	NATURAL EVENTS WITH CONCURRENCE EXCLUDED

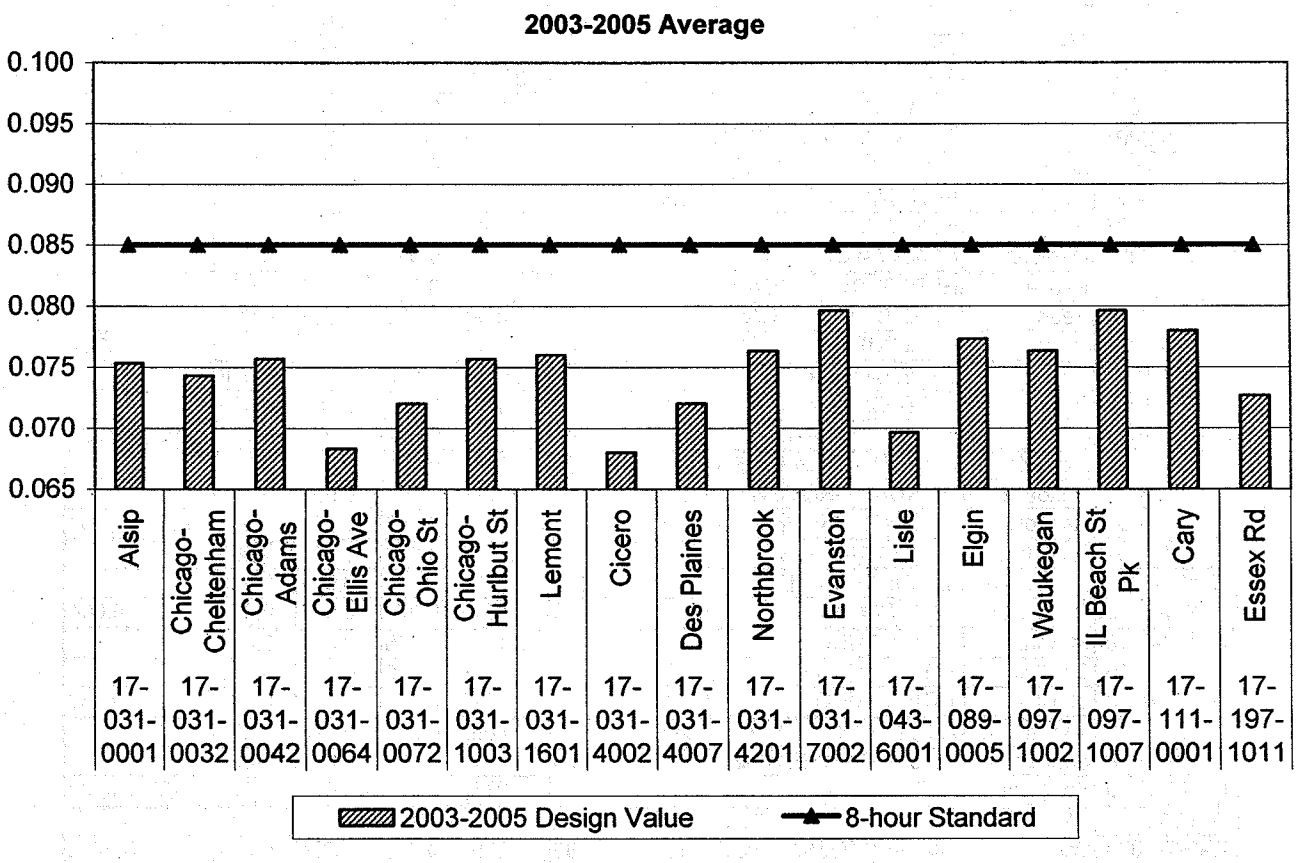
Ozone (44201) 8-HOUR — Indiana — PPM (007)

SITE ID	POC	REP ORG	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 8-HR	2ND MAX 8-HR	3RD MAX 8-HR	4TH MAX 8-HR	DAY MAX>/= 0.085	CERT	EDT
18-089-0022	1	520	Gary	Lake	201 MISSISSIPPI ST.	2003	47	96	176	183	0.081	0.08	0.077	0.076	0	Y	0
18-089-0022	1	520	Gary	Lake	201 MISSISSIPPI ST.	2004	47	100	183	183	0.07	0.064	0.064	0.064	0		0
18-089-0022	1	520	Gary	Lake	201 MISSISSIPPI ST.	2005	47	96	175	183	0.101	0.1	0.09	0.089	7		0
18-089-0024	1	520	Lowell	Lake	LOWELL WASTEWATER T	2003	47	98	179	183	0.101	0.09	0.088	0.081	3	Y	0
18-089-0030	1	520	Whiting	Lake	WHITING HIGH SCHOOL	2004	47	100	183	183	0.076	0.068	0.067	0.064	0	0	
18-089-0030	1	520	Whiting	Lake	WHITING HIGH SCHOOL	2005	47	100	183	183	0.103	0.092	0.089	0.088	4		0
18-089-2008	1	520	Hammond	Lake	1300 141 ST STREET	2003	47	96	176	183	0.088	0.088	0.084	0.081	2	Y	0
18-089-2008	1	520	Hammond	Lake	1300 141 ST STREET	2004	47	100	183	183	0.074	0.069	0.067	0.067	0		0
18-089-2008	1	520	Hammond	Lake	1300 141 ST STREET	2005	47	99	182	183	0.095	0.09	0.089	0.087	5		0
18-127-0020	2	520	Not in a city	Porter	INDIANA DUNES N. LA	2003	47	97	177	183	0.081	0.081	0.081	0.079	0	Y	0
18-127-0024	1	520	Not in a city	Porter	WATER TREATMENT PLA	2003	47	100	183	183	0.086	0.084	0.08	0.077	1	Y	0
18-127-0024	1	520	Not in a city	Porter	WATER TREATMENT PLA	2004	47	100	183	183	0.078	0.077	0.072	0.069	0		0
18-127-0024	1	520	Not in a city	Porter	WATER TREATMENT PLA	2005	47	99	181	183	0.109	0.098	0.091	0.09	7		0
18-127-0026	1	520	Valparaiso	Porter	VALPARAISO WATER DE	2003	47	100	183	183	0.09	0.09	0.082	0.082	2	Y	0
18-127-0026	1	520	Valparaiso	Porter	VALPARAISO WATER DE	2004	47	100	183	183	0.084	0.081	0.077	0.072	0		0
18-127-0026	1	520	Valparaiso	Porter	VALPARAISO WATER DE	2005	47	100	183	183	0.086	0.085	0.083	0.078	2		0

Whiting	Whiting HS		0.064	0.076
Hammond	Hammond	0.090	0.083	0.078
Portage	Dunes National Lake Shore	0.086	Site discontinued	
Ogden Dunes	Water Trmt Plant	0.087	0.082	0.079
Valparaiso	Water Trmt Plant	0.086	0.084	0.077



SITE ID	COUNTY	ADDRESS	YEAR	%OBS	1ST 8-HR	2ND 8-HR	3RD 8-HR	4TH 8-HR	2003-2005 Average
17-119-1009	Madison	200 W. DIVISION	2003	99	0.096	0.095	0.091	0.088	
17-119-1009	Madison	200 W. DIVISION	2004	99	0.082	0.081	0.08	0.078	
17-119-1009	Madison	200 W. DIVISION	2005	94	0.104	0.095	0.092	0.088	0.084666667
17-119-2007	Madison	POAG ROAD, EDWARD	2003	97	0.104	0.09	0.082	0.082	
17-119-2007	Madison	POAG ROAD, EDWARD	2004	98	0.076	0.075	0.068	0.068	0.0755
17-119-3007	Madison	54 N. WALCOTT	2003	100	0.102	0.101	0.093	0.083	
17-119-3007	Madison	54 N. WALCOTT	2004	98	0.081	0.08	0.073	0.073	
17-119-3007	Madison	54 N. WALCOTT	2005	99	0.099	0.093	0.091	0.087	0.081
17-143-0024	Peoria	HURLBURT & MACARTH	2003	100	0.072	0.071	0.07	0.068	
17-143-0024	Peoria	HURLBURT & MACARTH	2004	100	0.069	0.063	0.063	0.062	
17-143-0024	Peoria	HURLBURT & MACARTH	2005	100	0.08	0.076	0.075	0.073	0.067666667
17-143-1001	Peoria	508 E. GLEN AVE.	2003	99	0.079	0.078	0.078	0.076	
17-143-1001	Peoria	508 E. GLEN AVE.	2004	100	0.075	0.066	0.065	0.065	
17-143-1001	Peoria	508 E. GLEN AVE.	2005	100	0.08	0.077	0.077	0.077	0.072666667
17-157-0001	Randolph	HICKORY GROVE & FAI	2003	98	0.081	0.078	0.077	0.077	
17-157-0001	Randolph	HICKORY GROVE & FAI	2004	98	0.069	0.066	0.065	0.064	
17-157-0001	Randolph	HICKORY GROVE & FAI	2005	99	0.079	0.078	0.076	0.074	0.071666667
17-161-3002	Rock Island	32 RODMAN AVE	2003	100	0.084	0.074	0.071	0.068	
17-161-3002	Rock Island	32 RODMAN AVE	2004	100	0.076	0.06	0.059	0.059	
17-161-3002	Rock Island	32 RODMAN AVE	2005	100	0.081	0.078	0.071	0.065	0.064
17-163-0010	St. Clair	13TH & TUDOR	2003	97	0.111	0.106	0.086	0.079	
17-163-0010	St. Clair	13TH & TUDOR	2004	98	0.078	0.076	0.075	0.073	
17-163-0010	St. Clair	13TH & TUDOR	2005	100	0.11	0.103	0.101	0.094	0.082
17-167-0010	Sangamon	2875 N. DIRKSEN PAR	2003	99	0.08	0.077	0.076	0.075	
17-167-0010	Sangamon	2875 N. DIRKSEN PAR	2004	93	0.071	0.066	0.065	0.064	
17-167-0010	Sangamon	2875 N. DIRKSEN PAR	2005	97	0.078	0.077	0.076	0.075	0.071333333
17-197-1008	Will	2021 LAWRENCE, SOU	2003	98	0.093	0.08	0.079	0.077	
17-197-1008	Will	2021 LAWRENCE, SOU	2004	98	0.076	0.066	0.064	0.064	0.0705
17-197-1011	Will	36400 S. ESSEX RD.	2003	95	0.085	0.079	0.075	0.073	
17-197-1011	Will	36400 S. ESSEX RD.	2004	99	0.073	0.072	0.072	0.068	
17-197-1011	Will	36400 S. ESSEX RD.	2005	100	0.082	0.081	0.08	0.077	0.072666667
17-201-0009	Winnebago	1500 POST ST.	2003	97	0.081	0.079	0.078	0.076	
17-201-0009	Winnebago	1500 POST ST.	2004	98	0.074	0.073	0.071	0.064	
17-201-0009	Winnebago	1500 POST ST.	2005	100	0.08	0.079	0.076	0.075	0.071666667
17-201-2001	Winnebago	1405 MAPLE AVE.	2003	100	0.077	0.075	0.074	0.071	
17-201-2001	Winnebago	1405 MAPLE AVE.	2004	96	0.072	0.07	0.067	0.061	
17-201-2001	Winnebago	1405 MAPLE AVE.	2005	97	0.079	0.079	0.076	0.075	0.069


2003-2005 Average
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0.095
0.090
0.085
0.080
0.075
0.070
0.065
Alsip
Chicago-Cheltenham
Chicago-Adams
Chicago-Ellis Ave
Chicago-Ohio St
Chicago-Hurlbut St
Lemont
Cicero
Des Plaines
Northbrook
Evanston
Lisle
Elgin
Waukegan
IL Beach St Pk
Cary
Essex Rd
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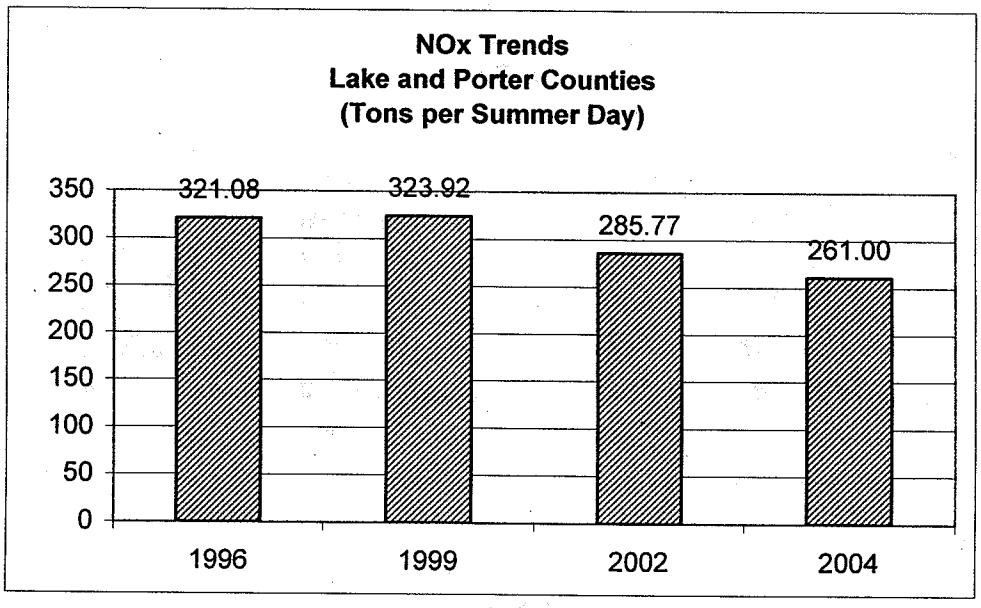
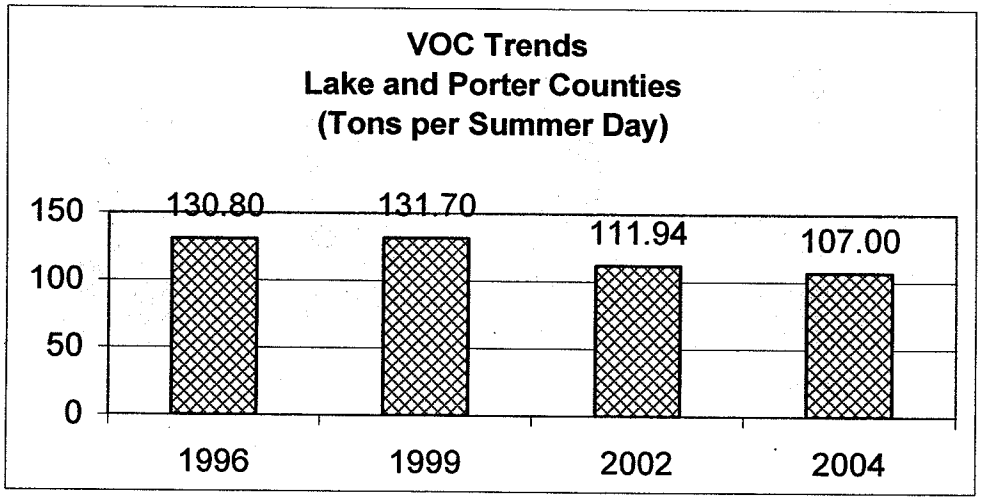
17-031-4201
17-031-7002
17-043-6001
17-089-0005
17-097-1002
17-097-1007
17-111-0001
17-197-1011
2003-2005 Design Value
8-hour Standard

APPENDIX B

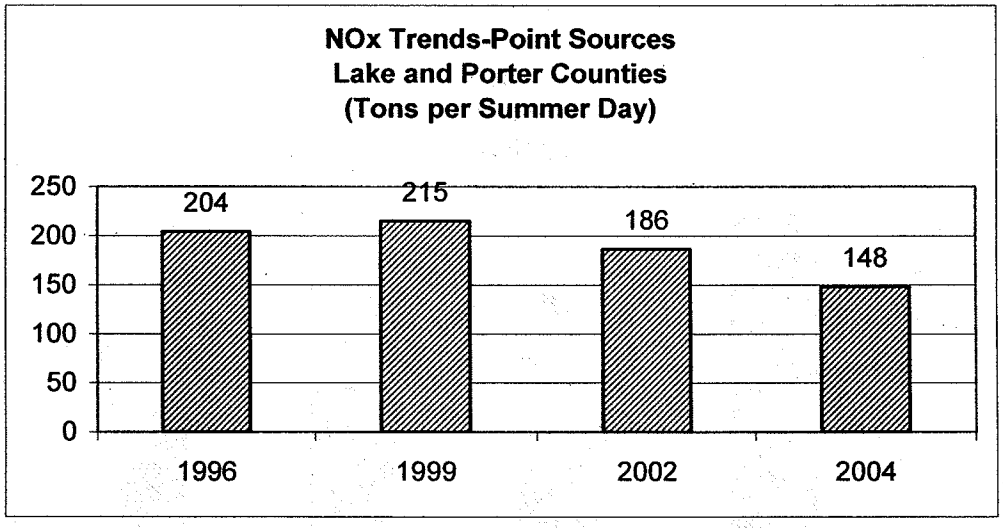
Emissions Inventories

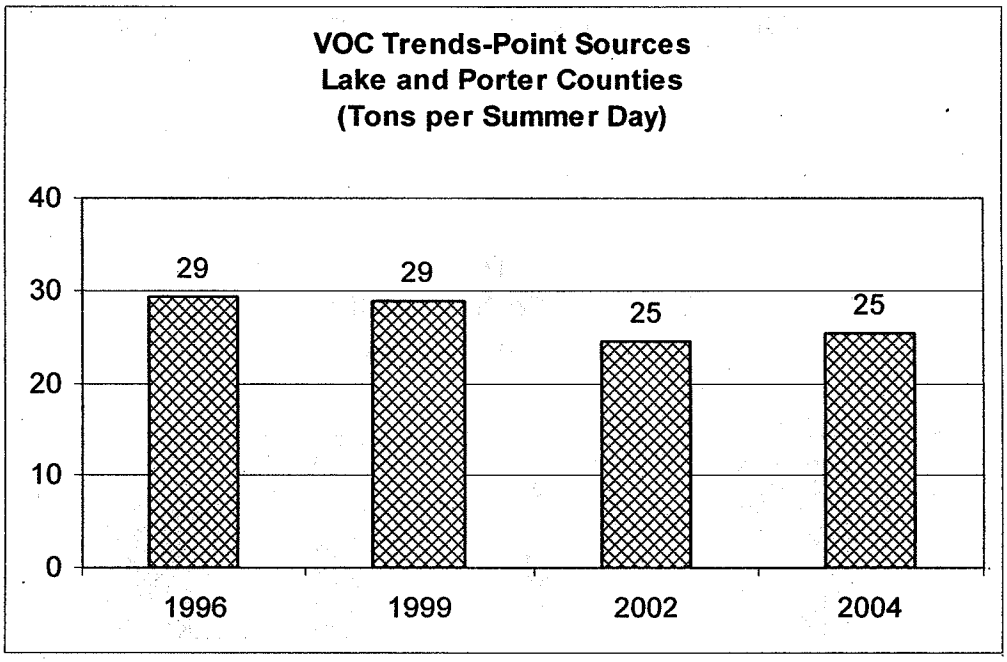
TOTAL-Lake and Porter Counties		
Year	NOX	VOC
1996	321.08	130.80
1999	323.92	131.70
2002	285.77	111.94
2004	261.00	107.00



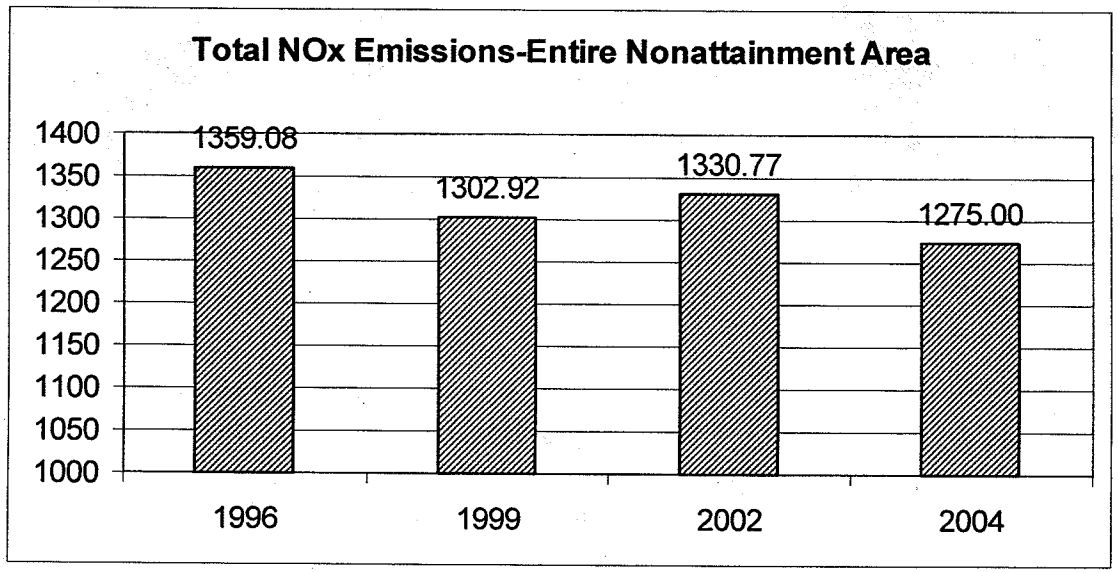


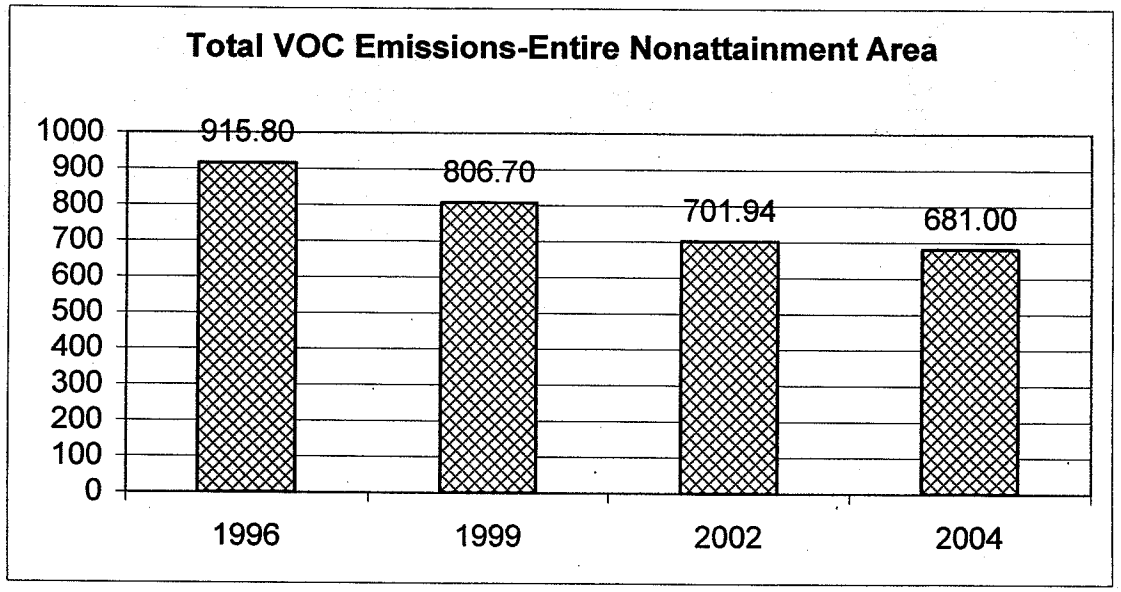
POINT -Lake and Porter Only		
Year	NOX	VOC
1996	204	29
1999	215	29
2002	186	25
2004	148	25



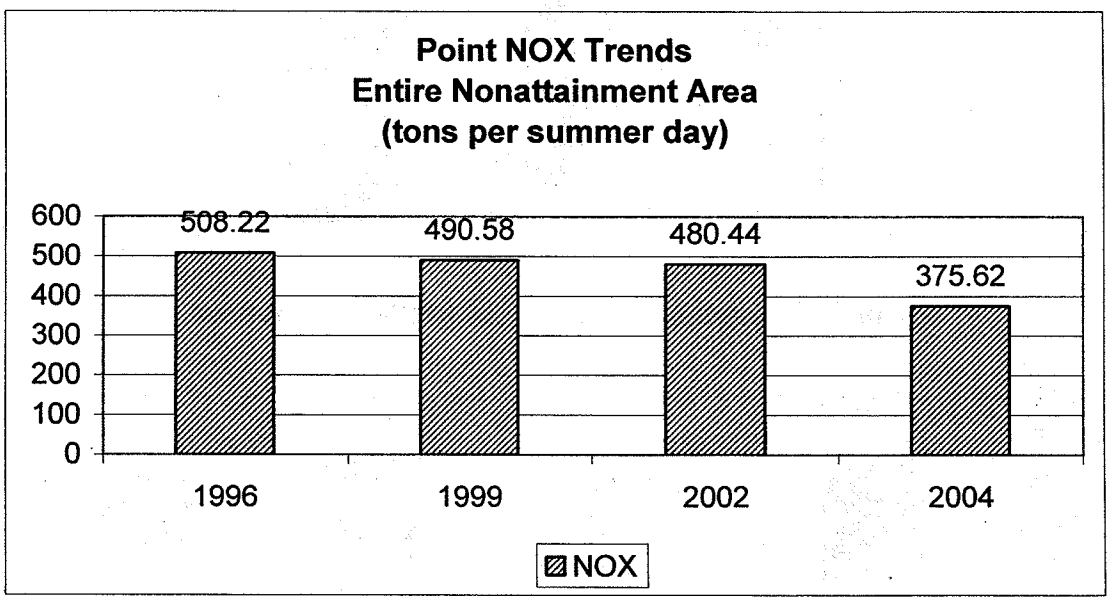


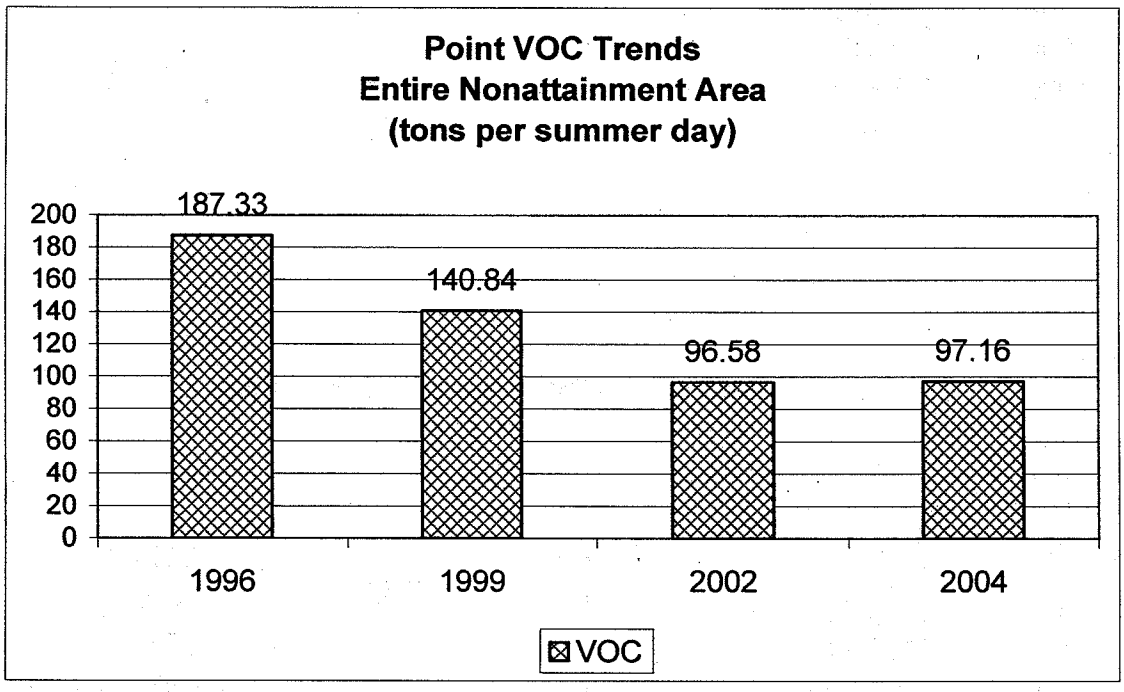
Entire Nonattainment Area		
Year	NOX	VOC
1996	1359.08	915.80
1999	1302.92	806.70
2002	1330.77	701.94
2004	1275.00	681.00



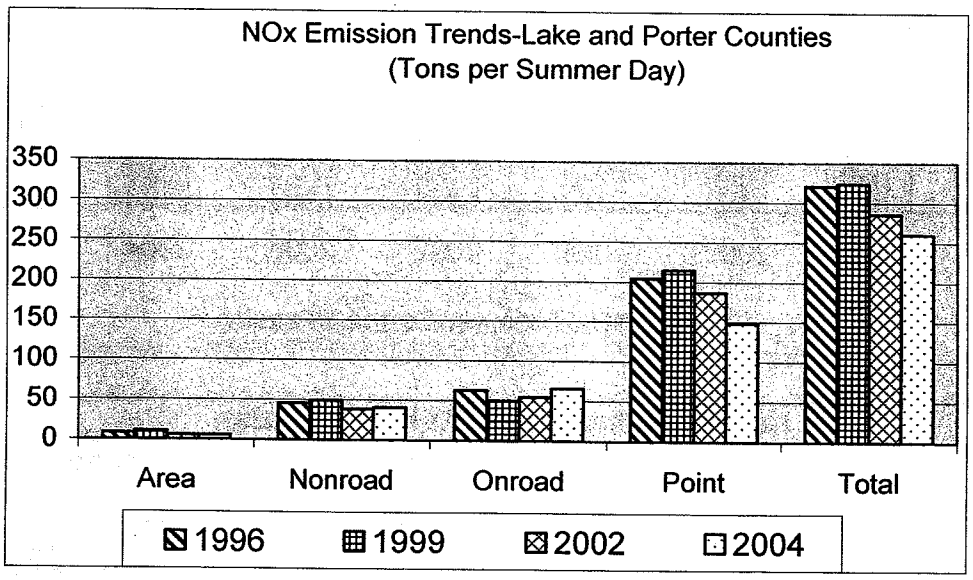


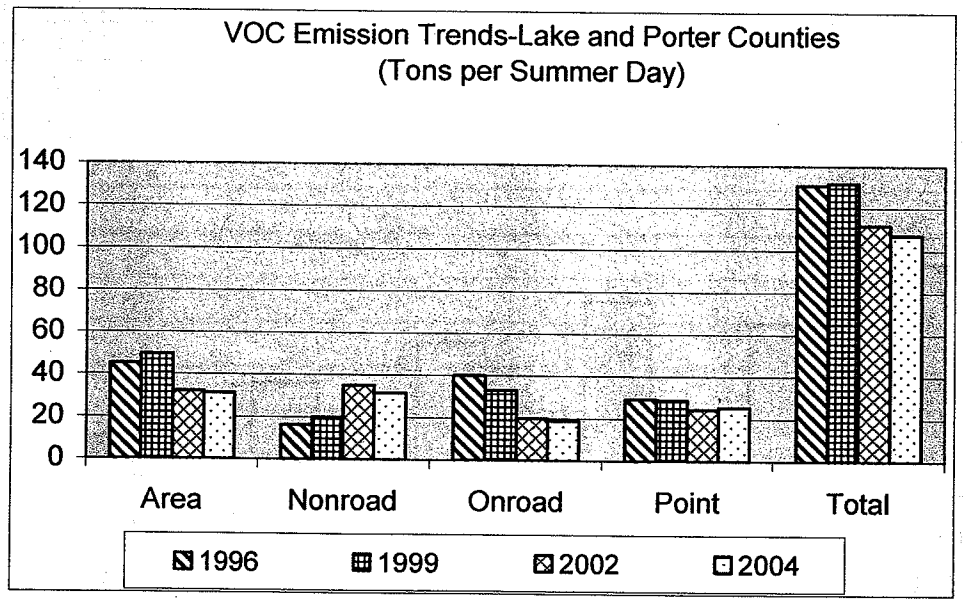
Point Trends - Nonattainment Area		
Year	NOX	VOC
1996	508.22	187.33
1999	490.58	140.84
2002	480.44	96.58
2004	375.62	97.16





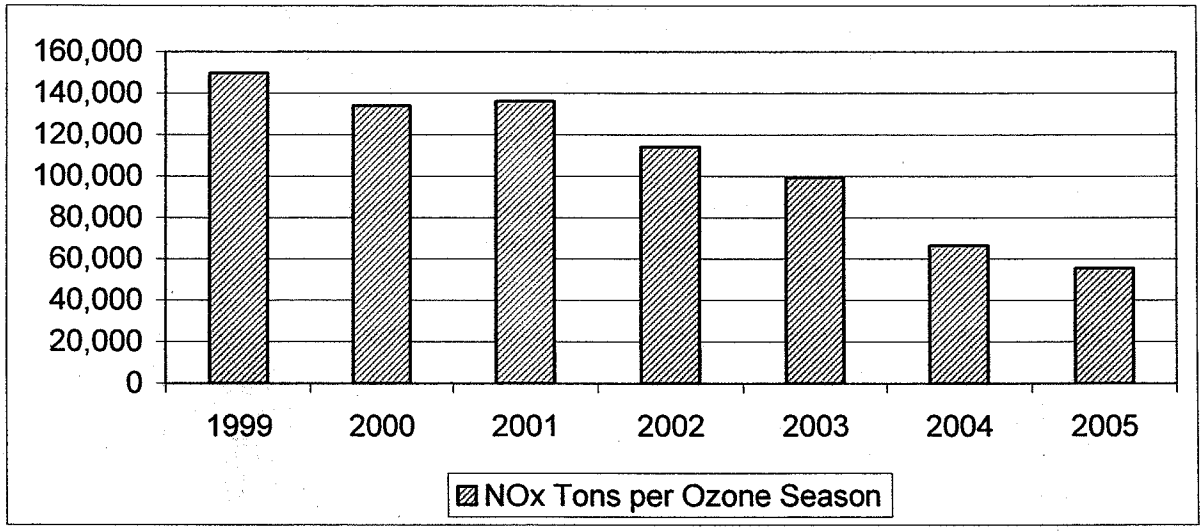
Lake and Porter Counties				
Sector	**NOX 1996**	**NOX 1999**	**NOX 2002**	**NOX 2004**
Area	8.02	10.36	5.72	5.76
Non-road	45.7	49.07	38.61	40.64
Mobile	63.14	49.92	55	65.95
Point	204.22	214.58	186.44	148.22
Total	321.08	323.93	285.77	260.57
Sector	**VOC 1996**	**VOC 1999**	**VOC 2002**	**VOC 2004**
Area	45.19	49.59	32.27	31.34
Non-road	16.23	19.98	35.09	31.63
Mobile	40.05	33.29	20	18.9
Point	29.33	28.84	24.58	25.43
Total	130.80	131.70	111.94	107.3



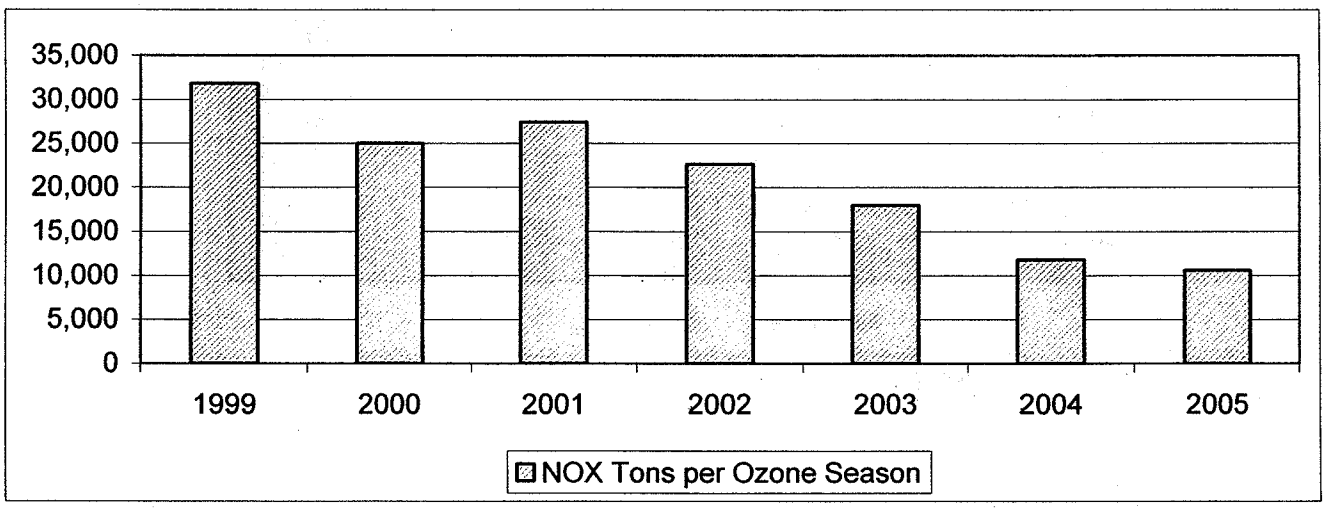


STATEWIDE EGU NOx TRENDS

Year	NOx Tons per Ozone Season
1999	149,827
2000	133,881
2001	136,052
2002	113,996
2003	99,283
2004	66,568
2005	55,486



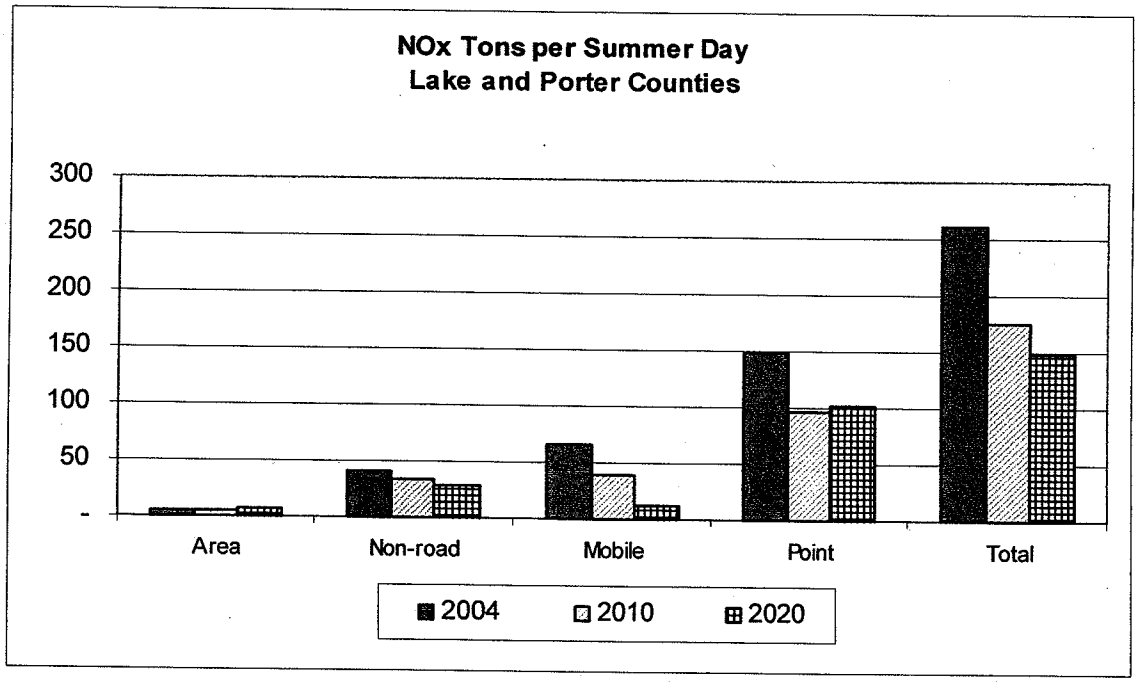
Northwest Indiana EGU NOX Trends	
Year	NOX Tons per Ozone Season
1999	31,815
2000	25,028
2001	27,394
2002	22,661
2003	17,984
2004	11,798
2005	10,591

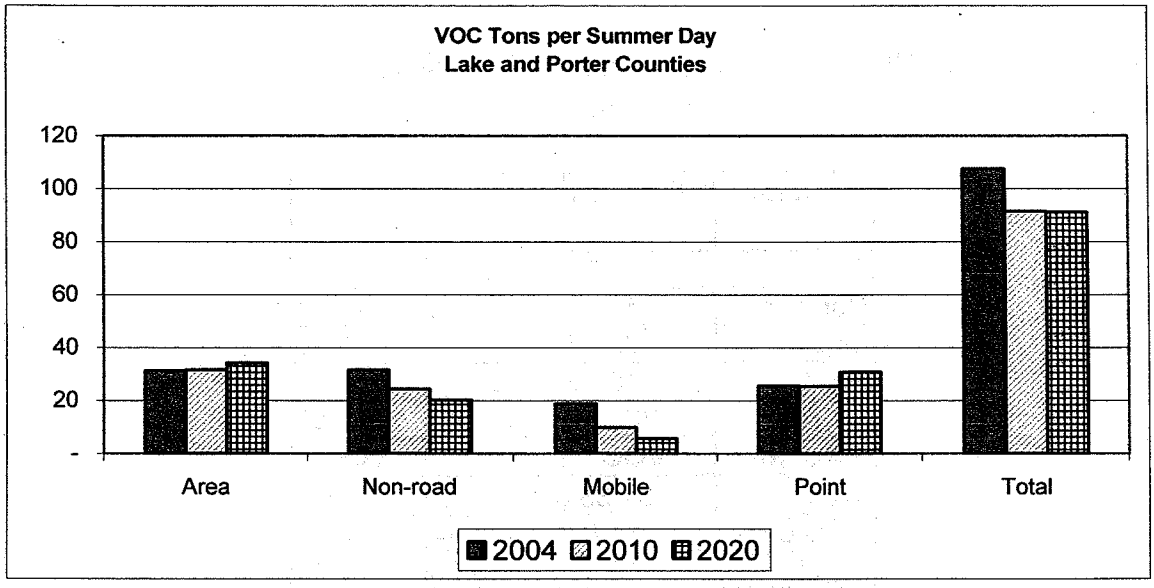


APPENDIX C

2010 AND 2020 Projected Emissions Inventory
Lake and Porter Counties

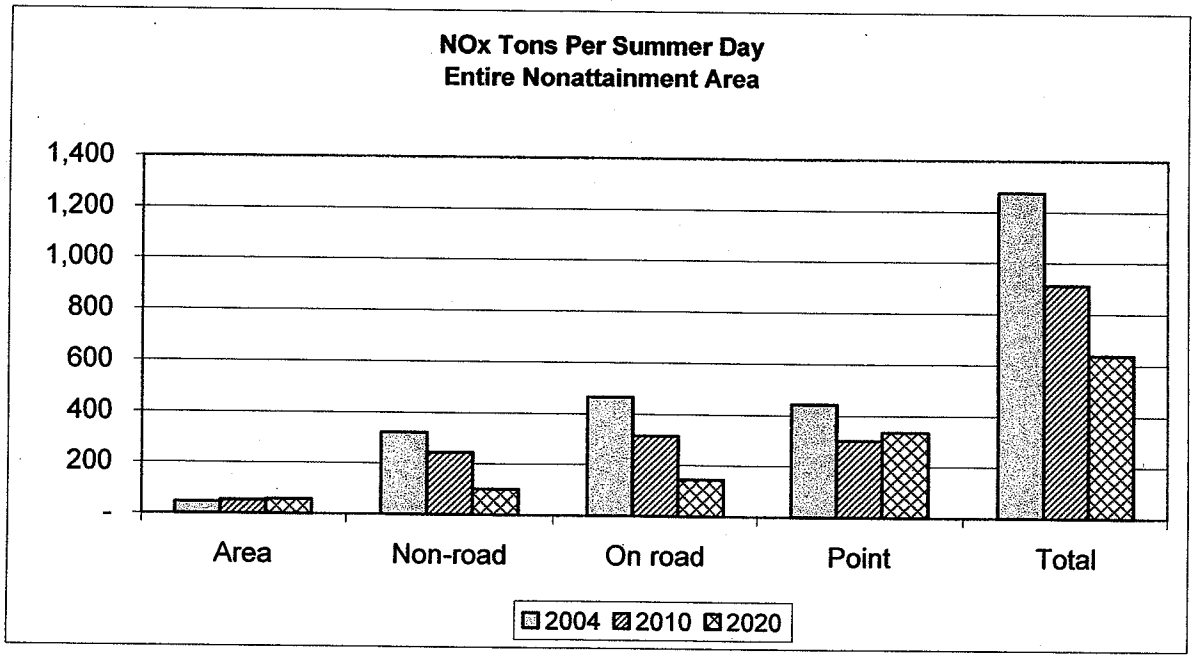
Sector	NOX 2004	NOX 2010	NOX 2020
Area	5.77	6.07	6.40
Non-road	40.64	33.95	28.51
Mobile	65.95	38.65	11.97
Point	148.20	97.06	102.15
Total	260.56	175.73	149.03
Sector	**VOC**	**VOC**	**VOC**
Area	31.33	31.72	34.31
Non-road	31.63	24.44	20.26
Mobile	18.90	9.93	5.71
Point	25.62	25.36	30.84
Total	107.48	91.45	91.12

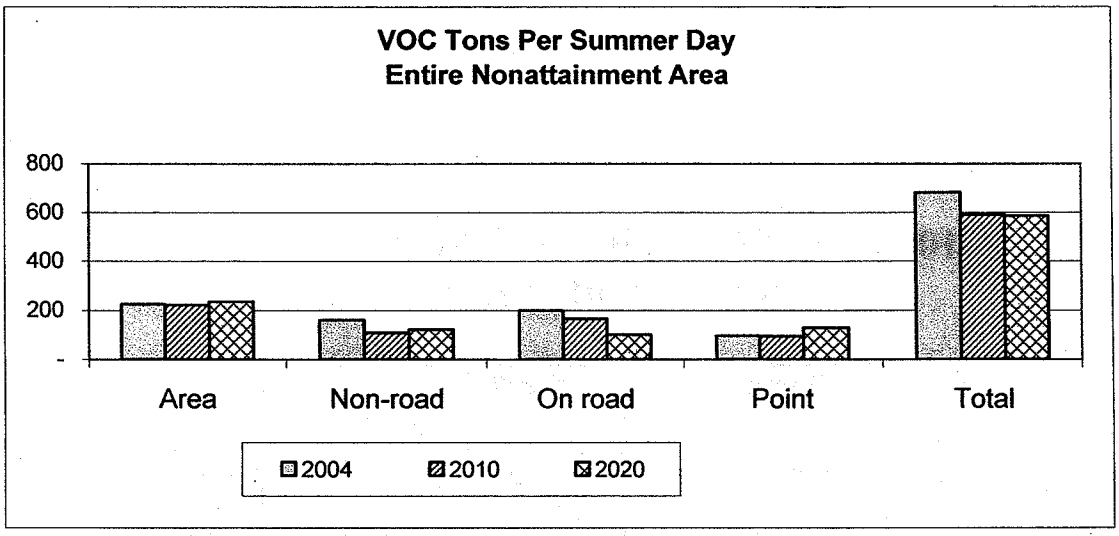



VOC Tons per Summer Day
Lake and Porter Counties
120
100
80
60
40
20
-
Area
Non-road
Mobile
Point
Total
2004
2010
2020

2010 and 2020 Projected Emissions Inventory
Entire Nonattainment Area

Sector	NOX 2004	NOX 2010	NOX 2020
Area	45.77	53.07	57.40
Non-road	321.64	242.95	101.51
On road	464.95	314.59	145.08
Point	442.21	301.06	334.15
Total	1274.57	911.67	638.14
Sector	**VOC 2004**	**VOC 2010**	**VOC 2020**
Area	225.34	221.72	234.32
Non-road	159.63	109.44	122.25
On road	198.90	165.27	100.60
Point	97.65	94.35	128.84
Total	681.52	590.78	586.01




VOC Tons Per Summer Day
Entire Nonattainment Area
800
600
400
200
-
Area
Non-road
On road
Point
Total
2004
2010
2020

APPENDIX D

Public Participation Documentation

LEGAL NOTICE OF PUBLIC HEARING

Redesignation Petition and Maintenance Plan in association with the 8 hour ozone standard, for Lake and Porter Counties.

Notice is hereby given under 40 CFR 51.102 that the Indiana Department of Environmental Management (IDEM) will hold a public hearing on Thursday, June 29, 2006. The purpose of this hearing is to receive public comment on the Draft Redesignation Petition and Maintenance Plan in association with the 8 hour ozone standard, for Lake and Porter counties. The meeting will convene at 6:00 p.m. (local time) in the Lake County Public Library, Room A, 1919 West 81st Avenue, Merrillville, Indiana. All interested persons are invited and will be given opportunity to express their views concerning the draft documents.

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- Indiana Department of Environmental Management, Northwest Regional Office, 8315 Virginia Street, Suite 1, Merrillville, Indiana

Oral statements will be heard, but for the accuracy of the record, statements should be submitted in writing. Written statements may be submitted to the attendant designated to receive written comments at the public hearing.

IDEM will also accept written comments through Friday, July 7, 2006. Mailed comments should be addressed to:

Lake and Poreter Counties Redesignation Petition and Maintenance Plan
Kathryn Watson, Chief
Air Programs Branch, Office of Air Quality – Mail Code 61-50
100 North Senate Avenue
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

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For additional information contact Mr. Scott Deloney, at the Indiana Department of Environmental Management, Office of Air Quality, Room 1001, Indiana Government Center North, 100 North Senate Avenue, Indianapolis or call (317) 233-5684 or (800) 451-6027 ext. 3-5684 (in Indiana).

Kathryn Watson, Chief
Air Programs Branch
Office of Air Quality

****

Individuals requiring reasonable accommodations for participation in this hearing should contact the IDEM Americans with Disabilities Act (ADA) coordinator at:

Attn: ADA Coordinator
Indiana Department of Environmental Management – Mail Code 50-10
100 North Senate Avenue
Indianapolis, IN 46204-2251

Or call (317) 233-1785 (voice) or (317) 232-6565 (TDD). Please provide a minimum of 72 hours notification.

Form Prescribed by State Board of Accounts . . . 3 . . . 4 . . . 5 . . . General Form No. 99 P (Rev. 1987) 8

IDEM/SANDRA ROBI PT7337 To POST-TRIBUNE Dr.
(Government Unit)

LAKE County, Indiana 1433 E. 83RD AVE., MERRILLVILLE, IN 46410-6307

PUBLISHER'S CLAIM

LINE COUNT

Display Matter (Must not exceed two actual lines, neither of which shall total more than four solid lines of the type in which the body of the advertisement is set) number of equivalent lines. .....

Head - number of lines. .....

Body - number of lines. .....

Tail - number of lines. .....

Total number of lines in notice .....

COMPUTATION OF CHARGES

72.00 lines, 2 columns wide equals 144.00 equivalent lines at .3290 cents per line $ 47.38

Additional charge for notices containing rule or tabular work (50 percent of above amount) .....

Charge for extra proofs of publication ($1.00 for each proof in excess of two) .....

TOTAL AMOUNT OF CLAIM $ 47.38

DATA FOR COMPUTING COST

Width of single column 6.8 ems

Size of type 5.5 point

Number of insertions 1

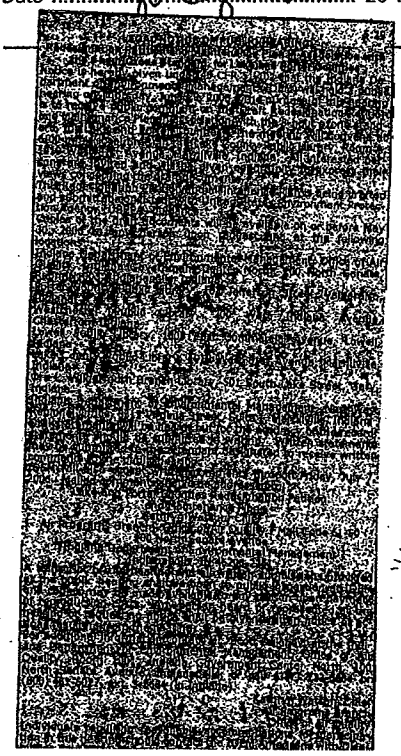
Pursuant to the provisions and penalties of Ch. 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid

Date July 6 20 06

Maribel Delbrey

Title CREDIT MANAGER/LEGAL CLER



PUBLISHER'S AFFIDAVIT

State of Indiana)
Lake County) SS

Personally appeared before me a notary public in and for said county and state, the undersigned MARIBEL DELBREY who being duly sworn, says that he/she is LEGAL CLERK of the POST-TRIBUNE a DAILY newspaper of general circulation printed and published in the English language in the city o MERRILLVILLE in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time, the dates of publication being as follows

REDESIGNATION PETITION Maribel Delbrey

5/29

Subscribed and sworn to before me this 6th day of July, 20 06

Veronica L. Cochran
Notary Public

My commission expires VERONICA L COCHRAN NOTARY PUBLIC STATE OF INDIANA LAKE COUNTY MY COMMISSION EXP. MAY 11,2008

Form Prescribed by State Board of Accounts

General Form No. 99P (Revised 2005)

Indiana Department of Environmental Management
(Governmental Unit)

Porter County, Indiana

To: Chesterton Tribune
193 S. Calumet Rd.
PO Box 919
Chesterton, IN 46304

Dr.

Newspaper Code 64002

PUBLISHER'S CLAIM

LINE COUNT

Display Matter (Must not exceed two actual lines, neither of which shall total more than four solid lines of type in which the body of the advertisement is set) -- number of equivalent lines _____

Head -- number of lines _____

Body -- number of lines _____

Tail -- number of lines _____

Total number of lines in notice 80

RECEIVED
STATE OF INDIANA
JUN 05 2006
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPUTATION OF CHARGES

80 lines, _____columns wide equals _____equivalent lines at .526 cents per line $ 42.08

Additional charge for notices containing rule or tabular work (50 percent of above amount) _____

Charge for extra proofs of publication ($1.00 for each proof in excess of two) _____

TOTAL AMOUNT OF CLAIM $ 42.08

DATA FOR COMPUTING COST

Width of single column 12.2 ems

Number of insertions one

Size of type 6 point

Pursuant to the provisions and penalties of Chapter 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Warren Canright

Warren Canright

Date: May 26, 2006

Title: Publisher

PUBLISHER'S AFFIDAVIT

State of Indiana)
) ss:
Porter County)

Personally appeared before me, a notary public in and for said county and state, the undersigned Warren Canright who, being duly sworn, says that he is publisher of the Chesterton Tribune newspaper of general circulation printed and published in the English language in the town of Chesterton in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for one time(s), the dates of publication being as follows:

May 26, 2006

Warren Canright

Subscribed and sworn to before me this 26 day of May, 2006

Margaret J. Lewis, Porter Co.

Margaret J. Lewis Notary Public Porter Co.

My commission expires: November 21, 2007

Width of single column 12.2 ems

Number of insertions one

Size of type 6 point

Pursuant to the provisions and penalties of Chapter 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Warren Canright

Warren Canright

Date: May 26, 2006

Title: Publisher

LEGAL NOTICE OF PUBLIC HEARING

Redesignation Petition and Maintenance Plan in association with the 8 hour ozone standard, for Lake and Porter Counties.

Notice is hereby given under 40 CFR 51.102 that the Indiana Department of Environmental Management (IDEM) will hold a public hearing on Thursday, June 29, 2006. The purpose of this hearing is to receive public comment on the Draft Redesignation Petition and Maintenance Plan in association with the 8 hour ozone standard, for Lake and Porter counties. The meeting will convene at 6:00 p.m. (local time) in the Lake County Public Library, Room A, 1919 West 81st Avenue, Merrillville, Indiana. All interested persons are invited and will be given opportunity to express their views concerning the draft documents.

This Redesignation Petition and Maintenance Plan is being drafted and submitted consistent with United States Environmental Protection Agency (USEPA) guidance.

Copies of the draft documents will be available on or before May 30, 2006 to any person upon request and at the following locations:

- Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, 100 North Senate, Room N1003, Indianapolis, Indiana.
- Porter County Public Library, 103 Jefferson Street, Valparaiso, Indiana.
- Westchester Public Library, 200 West Indiana Avenue, Chesterton, Indiana.
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- Ora L. Wildermuth Branch Library, 501 South Lake Street, Gary, Indiana.
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Oral statements will be heard, but for the accuracy of the record, statements should be submitted in writing. Written statements may be submitted to the attendant designated to receive written comments at the public hearing.

IDEM will also accept written comments through Friday, July 7, 2006. Mailed comments should be addressed to: Lake and Porter Counties Redesignation Petition and Maintenance Plan
Kathryn Watson, Chief
Air Programs Branch, Office of Air Quality - Mail Code 61-50
100 North Senate Avenue
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

A transcript of the hearing and all written submissions provided at the public hearing shall be open to public inspection at IDEM and copies may be made available to any person upon payment of reproduction costs. Any person heard or represented at the hearing or requesting notice shall be given written notice of actions resulting from the hearing.

For additional information contact Mr. Scott Deloney, at the Indiana Department of Environmental Management, Office of Air Quality, Room 1001, Indiana Government Center North, 100 North Senate Avenue, Indianapolis or call (317)233-5684 or (800)451-6027 ext. 3-5684 (in Indiana).

Kathryn Watson, chief
Air Programs Branch
Office of Air Quality

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Attn: ADA Coordinator
Indiana Department of Environmental Management - Mail Code 50-10
100 North Senate Avenue
Indianapolis, IN 46204-2251
Or call (317)233-1785 (voice) or (317)232-6565 (TDD).
Please provide a minimum of 72 hours notification.

PUBLISHER'S AFFIDAVIT

State of Indiana)
) ss:
Porter County)

Personally appeared before me, a notary public in and for said county and state, the undersigned Warren Canright who, being duly sworn, says that he is publisher of the Chesterton Tribune newspaper of general circulation printed and published in the English language in the town of Chesterton in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for one time(s), the dates of publication being as follows:

May 26, 2006

Warren Canright

Subscribed and sworn to before me this 26 day of May, 2006

Margaret Y. Lewis, Porter Co.

Margaret Y. Lewis Notary Public Porter Co.

My commission expires: November 21, 2007

Form Prescribed by State Board of Accounts

81956-4354807

General Form No. 99 P (Rev. 198

IND DEPT OF ENVIRONMENTAL MGMT

MARION COUNTY, INDIANA

To: INDIANAPOLIS NEWSPAPERS
307 N PENNSYLVANIA ST - PO BOX 145
INDIANAPOLIS, IN 46206-0145

PUBLISHER'S CLAIM

LINE COUNT

Display Matter - (Must not exceed two actual lines, neither of which shall total more than four solid lines of the type in which the body of the advertisement is set). Number of equivalent lines $_____

Head - Number of lines _____ $_____

Body - Number of lines _____ $_____ $_____

Tail - Number of lines _____ $_____

Total number of lines in notice _____

COMPUTATION OF CHARGES

129.0 lines 1.0 columns wide equals 129.0 equivalent $ 48.25

lines at .374 cents per line

Additional charge for notices containing rule and figure work (50 per cent of above amount) $_____

Charges for extra proofs of publication ($1.00 for each proof in excess of two) $ .00 $ .00

TOTAL AMOUNT OF CLAIM $_____

DATA FOR COMPUTING COST $_____

Width of single column 7.83 ems Size of type 5.7 point $_____ $_____

Number of insertions 1.0 $ 48.25

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,
I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

DATE: 05/30/2006

Sandy Neudigate Clerk
Title

81956-4354807

PUBLISHER'S AFFIDAVIT

State of Indiana SS:
MARION County

Personally appeared before me, a notary public in and for said county and state, the undersigned **SANDY NEUDIGATE** who, being duly sworn, says that SHE is clerk of the INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation printed and published in the English language in the city of INDIANAPOLIS in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time(s), between the dates of:

05/30/2006 and **05/30/2006**

Sandy Neudigate Clerk
Title

Subscribed and sworn to before me on **05/30/2006**

Susan Ketchem
Notary Public

My commission expires: _____

"OFFICIAL SEAL"
Susan Ketchem
Notary Public, State of Indiana
My Commission Exp. 05/06/2011

PUBLIC NOTICES

LEGAL NOTICE OF PUBLIC HEARING
Redesignation Petition and Maintenance Plan
in association with the 8 hour ozone standard,
for Lake and Porter Counties.
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• Ora L. Wilder muth Branch Library, 501 South Lake Street, Gary, Indiana
• Indiana Department of Environmental Management, Northwest Regional Office, 8315 Virginia Street, Suite 1, Merrillville, Indiana
Oral statements will be heard,

ATE PRESCRIBED FORMULA

3 PICA COLUMN - 94 POINT
POINTS / 5.7 PT. TYPE - 16.49
49 EMS / 250 - .06596 SQUARES
596 SQUARES x $5.14 - .339 CENTS PER LINE

RATE PER LINE

PUBLISHED 1 TIME = .339
PUBLISHED 2 TIMES= .509
PUBLISHED 3 TIMES= .679
PUBLISHED 4 TIMES= .848

MARION County

Personally appeared before me, a notary public in and for said county and state, the undersigned **SANDY NEUDIGATE** who, being duly sworn, says that SHE is clerk of the INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation printed and published in the English language in the city of INDIANAPOLIS in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time(s), between the dates of:

05/30/2006 and **05/30/2006**

Sandy Neudigate Clerk
Title

Subscribed and sworn to before me on **05/30/2006**

Susan Ketchem
Notary Public

"OFFICIAL SEAL"
Susan Ketchem
Notary Public, State of Indiana
My Commission Exp. 05/06/2011

My commission expires: _____

PUBLIC NOTICES

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Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

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Kathryn Watson, Chief
Air Programs Branch
Office of Air Quality

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100 North Senate Avenue
Indianapolis, IN 46204-2251
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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC HEARING ATTENDANCE RECORD

Title of Public Hearing: LAKE & PORTER REDESIGNATION **Location:** _____ **Date:** 6/29/06

Please print all the information:

NAME	ORGANIZATION/ COMPANY	PHONE NUMBER	ADDRESS
Jim Alexander	U.S. STEEL	219 883387	1 North Broadway Gary IN
DAVE BEHRENS	U. S. STEEL	219-888-7938	1 N. BROADWAY GARY IN 46373
Mark Strimbu	NiSource	219-647-5269	801 E. 86th Ave. Merrillville, IN 46410
Susan Mihalo	Save the Dunes	219 879-3937	8 Diana Rd Ogden Dunes IN 46368
R MURLYN	IND C C	219 924 5619	1917 E ELM ST GRIFFITH IND
JOHN WALTERS	LAKE CO. RESIDENT	9804038	1800 E. MAIN. GRIFFITH
Jim BARTOS	" " "	688-4814	1142 N. VERMILLION ST. GARY
Patty Sucheinski	Porter Co. Resident		Portage
KEN MENTZEL	US STEEL	2198884500	1 NORTH BROADWAY GARY IN.
Rodney Sommerville	CITY OF GARY	219.882.3000	839 BROADWAY, GARY, IN 46402
Sandy O'Brien	Sierra Club	219-942-2956	5500 S. Liverpool RD. Hobart IN 46342

Revised 5/16/97 kv

BEFORE THE INDIANA DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT

- - -

PUBLIC HEARING REGARDING
THE DRAFT REDESIGNATION PETITION
AND MAINTENANCE PLAN IN ASSOCIATION
WITH THE 8 HOUR OZONE STANDARD
FOR LAKE AND PORTER COUNTIES

- - - ORIGINAL

PROCEEDINGS

in the above-captioned matter, before Hearing Officer Scott Deloney, taken before me, Lindy L. Meyer, Jr., a Notary Public in and for the State of Indiana, County of Shelby, at the Lake County Public Library, Conference Room A, 1919 West 81st Avenue, Merrillville, Indiana, on Thursday, June 29, 2006 at 5:59 o'clock p.m.

- - -

William F. Daniels, RPR/CP CM d/b/a
ACCURATE REPORTING OF INDIANA
12922 Brighton Avenue
Carmel, Indiana 46032
(317) 848-0088

APPEARANCES:

ON BEHALF OF IDEM:
Scott Deloney
Kathryn Watson

SPEAKERS PRESENT:

Mark Strimbu
Susan Mihalo
John Walters
Sandy O'Brien
Jim Bartos
Richard Murzyn

- - -

5:59 o'clock p.m.
June 29, 2006

- - -

THE HEARING OFFICER: Good evening. This is a public hearing to accept comments concerning the draft redesignation petition and maintenance plan in association with the eight-hour ozone standard for Lake and Porter Counties. This hearing is being held to conform to the provisions in 40 CFR, Part 51 regarding public hearings for state implementation plan submittals.

My name is Scott Deloney. I'm the Section Chief for the Planning and Policy Section of the Indiana Department of Environmental Management's Office of Air Quality. I've been appointed to act as Hearing Officer for this public hearing. Also here from the Indiana Department of Environmental Management's Office of Air Quality is Kathryn Watson, Chief of the Air Programs Branch.

Notice of the time and place of the hearing was given as provided by law by publication in the following newspapers: The

Indianapolis Star, Indianapolis, Indiana; the Chesterton Tribune, Chesterton, Indiana; the Post Tribune, Gary, Indiana; and Post Tribune, Merrillville, Indiana.

The purpose of this public hearing is to provide interested persons an opportunity to offer comment to the state regarding the draft redesignation petition and maintenance plan for Lake and Porter Counties. Appearance blanks have been distributed in the hearing room for all of those desiring to be shown appearing on record in this cause. These blanks -- I've got extra up here. There are some on the back table as well.

If you've not already filled out a form, please do so, and indicate if you are appearing for yourself or on behalf of a group or organization, and identify such group or organization. Also note the capacity in which you appear, such as attorney, officer or authorized spokesperson.

Any person who is heard or represented at this hearing, or who requests notice, may be

given written notice of the final action taken on the state implementation plan submittal. Please indicate on the appearance card if you wish to receive this notification. When appearance cards have been completed, they should be handed to me. I will include them with the official record of this proceeding.

Oral statements will be heard, but written statements may be handed to me or mailed to the Office of Air Quality on or before close of business on July 7th, 2006. Just for the record, there are formal comment forms and preaddressed envelopes there, too, if you plan to submit written comments.

A written transcript of this hearing is being made. The transcript will be open for public inspection, and a copy of the transcript will be made available to any person upon payment of the copying costs.

After the conclusion of this public hearing I'll prepare a written report summarizing the comments received at this hearing and recommending changes which may need

to be made to this document.

I would like to introduce the following documents into the record: The notice of public hearing; and the draft request for re -- the draft request for redesignation and maintenance plan for ozone attainment in the eight-hour ozone nonattainment area for Lake and Porter Counties.

Finally, I would like to briefly go over the contents of the draft document. In 1997, the United States Environmental Protection Agency established a new more stringent standard for ozone, referred to as the eight-hour ozone standard. The standard itself was established at .08 parts per million measured over an eight-hour period.

Within the Guidelines On Data Handling Conventions for the Eight-Hour Ozone National Ambient Air Quality Standard published by the U.S. EPA in December of 1998, the U.S. EPA established parts per million and three significant figures as the basis for computation of eight-hour ozone concentrations.

In accordance with this guidance, three significant digits are used to determine an area's design value and for conducting attainment tests. Specifically, because the third decimal digit is rounded, .084 parts per million is the largest concentration that is less than or equal to the standard of .08 parts per million. Therefore, an ozone concentration equal to or greater than .085 per million is considered to be above or in violation of the standard.

Legal challenges to the new standard for ozone resulted in delayed implementation of the standard until February 2001, when the Supreme Court ruled that the U.S. EPA could proceed with implementation of the new standard, providing the U.S. EPA's implementation is consistent with the Clean Air Act.

The U.S. EPA's first action in implementing the new standard for ozone was to designate areas throughout the country as attainment, nonattainment, or unclassifiable.

Lake and Porter Counties were designated nonattainment under the eight-hour ozone standard on April 15th, 2004. This designation was based on a monitored design value of .087 parts per million.

This design value derived from an average of the annual fourth highest ozone values over the previous three years, those being 2001 through 2003. At the conclusion of the 2005 ozone season, all monitors within Lake and Porter Counties measured air quality that meets the national ambient air quality standard for ozone.

The most recent design value for the area is .078 parts per million, which is based on an average of the annual fourth highest ozone values over the years 2003 through 2005. This design value represents ozone concentrations that are below the national ambient air quality standard.

Thus, the area is eligible to be redesignated to attainment under the eight-hour ozone standard and classified maintenance.

Lake and Porter Counties also measured air quality that met the standard at the close of the 2004 ozone season.

The Indiana Department of Environmental Management has prepared the draft redesignation petition and maintenance plan for Lake and Porter Counties in accordance with U.S. EPA guidance. The draft petition outlines a demonstration that Lake and Porter Counties, along with the entire nonattainment area, have attained the standard based on monitored concentrations, and that the reductions in monitored concentrations are attributable to permanent and enforceable reductions in precursor emissions, specifically reductions of both volatile compounds and oxides of nitrogen.

The implementation of national controls such as the NO_x SIP Call and Tier II engine and low sulfur gasoline standards, combined with local controls like reasonably available control technology and the vehicle emissions testing program have led to significant improvements in air quality within the area.

The draft maintenance plan also outlines the following: Precursor emissions of volatile organic compounds and oxides of nitrogen will continue to climb into the future; due to existing and future emission controls, the area's air quality is not projected to worsen and should improve further over time; a commitment for all existing emission controls to remain in place; a commitment to revise the plan within eight years of redesignation; a commitment to adopt and expeditiously implement necessary corrective actions if a warning or action level response is triggered.

A warning level response is triggered by a one-year fourth high monitored value of .089 parts per million, or a two-year fourth high of .085 parts per million. A warning level response includes a detailed study to determine whether ozone values indicate a trend toward higher concentrations and whether emissions within the area are increasing.

The study will also evaluate whether

the trend, if any, is likely to continue, and if so, the control measures necessary to reverse the trend. If the study determines that action is necessary, the state will initiate an action level response.

An action level response, if not triggered from a follow-up to your warning level response, is triggered by a three-year average fourth high monitor value of .085 parts per million, or a determination from a warning level response that action is necessary.

In the event that an action level response is triggered and it is determined that it is not due to an exceptional event or monthly malfunction, the state will determine what level of additional controls are necessary in consultation with the community.

The list of contingency measures within the draft maintenance plan is for illustrative purposes only. This list derives primarily from recommendations from a Northwest Indiana Air Quality Steering Committee.

Because it is not possible at this time

to determine what control measures will be most appropriate at an unspecified time in the future, the list within the draft maintenance plan is not to be considered comprehensive. The maintenance plan also includes a mobile source budget for transportation conformity purposes.

This concludes my comments regarding the draft redesignation petition and maintenance plan for Lake and Porter Counties. This hearing is now open for public comment, and I do have a few comment forms that -- I'm going to call on individuals individually, and you'll have an opportunity to speak.

I do ask if you wouldn't mind just approaching the front of the room just so that our recorder is able to get all of the information from you recorded accurately.

First up, I have Mark Strimbu, who is with NIPSCO, or NiSource.

Mark?

MR. STRIMBU: Hi. I'm Mark Strimbu with NiSource, representing both NiSource and

NIPSCO.

I'd like to thank IDEM for the opportunity to comment and for the efforts that they have taken to work towards this redesignation. It's reflective of several hard-fought reductions. By that, I mean there were several difficult choices that had to be made to many productions to help improve the air quality in this area.

And that's reflective of those efforts as well as the larger regional- and, in some cases, national-scale efforts to bring air quality into attainment of the national ambient air quality standard, so I'd like to express my appreciation to IDEM for their efforts in following through with this to reflect the hard work that's been done to bring air quality in this area into attainment.

And I appreciate the work from the other members of the Air Quality Steering Committee that have worked to develop recommendations and work through this process, and I will be submitting some separate written

comments later.

Thank you.

THE HEARING OFFICER: Thank you.

Next, I have Susan -- is it Mihalo?

MS. MIHALO: Mihalo.

THE HEARING OFFICER: Mihalo, with the Ogden Dunes Environmental Advisory Board.

MS. MIHALO: As well as Save the Dunes.

THE HEARING OFFICER: As well as Save the Dunes.

MS. MIHALO: Okay. Save the Dunes Counsel appreciates the opportunity to address air quality issues in Northwest Indiana. We have worked with you for the years to reduce pollution and improve air quality. We are encouraged by air quality improvements to date, and future reductions which will happen because of the Clean Air Interstate Rules.

However, we have some serious concerns about redesignating Lake and Porter Counties as attainment for ozone, for the following reasons: There is uncertainty over the major

source of NO_x and SO_2 in Lake County. The Dean Mitchell Power plant, located in Gary, along the Lake Michigan lakefront, was closed in 2002. Now, a recent settlement before the IURC is revisiting the issue to determine whether the reopen the plant.

Mitchell is currently in the SIP inventory, but has not operated for almost five years. Should the plant reopen, these emissions could negatively impact air quality. Should the petition be granted, Northwest Indiana will lose the current offset provision, which requires new sources to offset increased emissions. We understand that this would not be required as an attainment area.

All monitors should be considered. We have a concern that information from existing monitors has not been considered for this decision. For example, it is our understanding that there is an ambient air monitor just south of U.S. 12 at Matoll Steel, and we urge the state to include that information in any submission to EPA, or to at least recognize

that those monitors exist, or state why they're not being included.

Scott, I thought I remembered you saying something at the NIRPC meeting a couple of months ago about why monitors on industrial sites could not be included. I keep trying to find that information. I really think it should be included in the petition why you don't include that information. It is our belief that the threshold for the trigger for the maintenance plan is too high. At 89 parts per billion, this is over the current standard.

Unusual weather occurrences should also be considered, regardless of the fact that you are using three-year averages. We have had relatively cool summers the past two years, especially in 2004. Even considering those cool years, the fourth highest reading for Gary was 0.089, for Hammond was 0.087, and for Ogden Dunes was 0.090. To protect public health, there needs to be a margin of safety should the climate continue to get warmer, as indicated by recent news reports about global warming.

And making unsubstantiated statements in the petition, such as ozone formation in the future will be influenced less by meteorological conditions, on page 43, is misleading. Instead, you should have stated that the longer averaging time in the averaging of three years data reduces the influence of unusual meteorological conditions in a given year. But this still does not take into account unusual weather conditions that may occur over a period of years. I mean how often do you hear about a one-year drought? Weather just doesn't work that way.

There are many new sources proposed for Northwest Indiana, including a large intermodal surface transportation facility, increased airport development, and a new power plant now under study. The impact from these developments must be considered as part of any redesignation effort.

In addition, this petition ignores new sources that may develop in the Chicago metropolitan area that may adversely affect our

ambient air standard. Lake and Porter Counties do not exist in an island unto themselves. Cook County has received an F on ozone in the American Lung Association's 2006 State of the Air Report, and incidentally, Lake and Porter Counties also received F's in this report.

Breaking these counties from the Chicago metropolitan area also would create incentives for additional sprawl development in Lake County, and more particularly, Porter County, according to a report provided to the U.S. Congress by the Congressional Research Service of the Library of Congress in 2004. That is one of the reasons why metropolitan statistical areas were created for attainment, according to this report.

This petition flies in the face of regional and interstate cooperation to improve air quality. It sends a message to the rest of the region that all of work we have done together over the years toward achieving attainment in meaningless.

If we were in attainment, I'm not sure

we would have had the impetus to implement idle air technology at our truck stops, technology that will remove 20 million pounds of diesel emissions and save one million gallons of diesel fuel annually, according to a recent news report in the Times of Northwest Indiana.

We also feel compelled to remind everyone that the Indiana Dunes National Lakeshore lies in these counties. According to EPA, ground-level ozone interferes with the ability of plants to produce and store food so that growth, reproduction and overall plant health are compromised. By weakening sensitive vegetation, ozone makes plants more susceptible to disease. These effects can significantly decrease the natural beauty of an area such as the Indiana Dunes National Lakeshore.

And I realize that since it's not a national park, per se, you may not have to follow some of those stricter guidelines, but it still is a very sensitive ecological area.

Therefore, based on these reasons, we urge the -- Indiana to withdraw the petition

for redesignation to EPA that is the subject of today's hearing, and we will also be submitting written comments prior to the July 7th deadline.

Thank you very much.

(Applause.)

THE HEARING OFFICER: Next, I have Richard Murzyn.

MR. MURZYN: I concede my time to him. He -- we're together, so he's going to speak.

THE HEARING OFFICER: Okay.

John Walters, is that --

MR. WALTERS: Yes.

THE HEARING OFFICER: Okay.

MR. WALTERS: Yes.

My name is John Walters. I'm here as a private citizen, and I'm here because I'm sick and tired of breathing in sulfur dioxide. I've lived in Lake County for the last 34 years, next door to Walsh & Kelly Construction asphalt plant in Griffith.

Two years ago IDEM, in their infinite

wisdom, allowed Walsh & Kelly to begin burning scrap oil and scrap asphalt rather than natural gas. I have documents to substantiate what I'm saying, and by Walsh & Kelly's own documents, this allows them to pump 50 pounds per hour of sulfur dioxide into the air.

I live in a cloud of sulfur dioxide. I can't breathe. I have articles here that clearly illustrate the air quality in Lake County is getting worse. Porter County is getting worse. It's not getting better.

IDEM's manifest function is to protect the citizens of this state. When you allow business to come in and ask us and ask you to reduce the standards in this county so that business can come in, industry can come in and pollute us more, someday you're going to have to look your grandchildren in the eyes and tell them why the branches on the trees are dead from acid rain. You're going to have to tell them why their friends are dying of cancer. So, for you to promote more pollution is disgraceful.

I'm here as a private citizen to voice my objection to this. We have not reached standards. The only reason we're even here is because the Federal Government and IDEM has changed the way you measure pollution, allowing industry to dump more pollution and record less.

When I look at EPA headlines that say Porter County's air quality deterior -- I've got a whole folder there. So, when you come in here and promote these ideas, you're promoting big business, at our health, our quality of life. I say the people of Lake County need to reject this, because we do not have clean air in this county. It's getting worse. And you want to allow them to put more pollution in the air.

Now, if anybody wants to see, I've got envelopes full of newspaper articles. Every day you can read where the EPA -- here is the agency says any -- the EPA -- this is from the Hammond Times, if you want to see it, February 24th, '06, pollution poses cancer

risks in Lake and Porter County. Any risk greater than one in a million is cause for cancer concern.

It goes on to say that Lake County neighborhoods have a 499 percent chance in a million of getting cancer, so Lake County figures, but the EPA's own data, says that our chance of getting cancer in this county are 500 times greater than it is anywhere else in this state, and you want to help big business raise those numbers? Maybe next year it'll be a thousand and a million.

Don't do this to your citizens. You represent us. IDEM, Environmental Management, not Environmental Kiss Big Business' Ass. Vote no. Do not allow more pollution in this county.

(Applause.)

THE HEARING OFFICER: I do not have any additional comment slips. Was there anyone else that wished to speak this evening?

MS. MIHALO: I did have a question or two.

THE HEARING OFFICER: Okay.

Thank you.

Sandy O'Brien, with Environmental Health.

MS. O'BRIEN: Well, I'm from Dunelands Sierra Club, and we do not see this as a positive thing, trying to redesignate in Lake and Porter Counties for attainment, and we think that it should be refused also, and we just can't figure out why the American Lung Association and, you know, the newspaper articles, the EPA data, everything shows that Lake and Porter County's pollution is not A-1, it's F, and why are we trying to redesignate to allow new sources of pollution?

It just doesn't seem right for the people of Lake County, especially, because we breathe a lot of bad stuff in our air, and we don't want it to get worse, that's for sure. We'd like it to get better.

Thank you.

THE HEARING OFFICER: Thank you.

(Applause.)

MR. BARTOS: Do I need to fill out a card?

THE HEARING OFFICER: If you wouldn't mind just giving me one before you leave. It's okay to go ahead and come up and speak. We just want to make sure --

MR. BARTOS: Okay.

THE HEARING OFFICER: -- that we have your name recorded properly in the record.

MR. BARTOS: Okay. My name is Jim Bartos, B a r t o s. I'm a life-long resident of Lake County, Indiana, and I agree with the two previous people that have -- or the three, excuse me -- that have spoken, that I wish -- I think it's a step backwards. Please don't do this. I'm just going to keep it simple; okay? Police do not -- please rethink this. It's a step backwards.

Thank you.

THE HEARING OFFICER: Thank you.

Are there any other formal comments for the public hearing?

(No response.)

THE HEARING OFFICER: And Susan, you had some additional questions?

MS. MIHALO: Yes, I have a question, yeah.

THE HEARING OFFICER: Okay. We will be available and would be happy to talk to you at length and answer any questions that you have.

Are there -- if there are no further comments to be made during the public hearing, the proceedings will hereby be concluded. One last call: Any other formal comment for the hearing this evening?

Sir?

MR. MURZYN: I'd like to read something, if I may.

THE HEARING OFFICER: Sure. If you don't mind --

MR. MURZYN: This is a police report from the --

THE HEARING OFFICER: If you mind giving the court reporter your name.

MR. MURZYN: My name's Richard,

Richard Murzyn. I'm a life-long --

MR. WALTERS: You've got his card.

THE HEARING OFFICER: Oh, okay. We've got your card here; I'm sorry. Richard Murzyn?

MR. MURZYN: Yes.

THE HEARING OFFICER: Okay.

MR. MURZYN: Since 1975, this hasn't changed. I had called the police because I couldn't breathe anymore and my eyes were swollen and my nose was burning.

MR. WALTERS: This is in reference to Walsh & Kelly.

MR. MURZYN: At the above date and time, officer was dispatched to 1917 Elm Street on a miscellaneous call. Upon arrival, officer talked to complainant, who stated that at 6:00 a.m. until 11:30 p.m. a very noxious gas smell was coming from Walsh & Kelly blacktop -- blacktop paving equipment. The smell is an everyday occurrence and is subject to -- and the subject requested assistance. Officer agreed that the smell was unbearable at this

point and advised victim to contact a lawyer and EPA about this situation.

This has been going on for 25 years. I've got 600 names on a petition. I've talked to Congress, the U.S. Congressmen, Lowski and Benjamin, and then sat with Lugar, and all -- I've been pushed from one organization to another. It's just been one vicious circle since 1975 this has been going on.

We asked them not to take and fill in a lake by us. The Corps of Army Engineers gave them permission. When they did, when they filled our lake, they flooded the surrounding area. They had to alleviate it by digging it out. In turn, what they put in there now is leaching onto my property and all of the other property, which consists of what, John; phenol, or --

MR. WALTERS: Phenols, but that's a separate issue. Walsh -- we've got an issue with Walsh & Kelly, the residents there. They pollute our air, they pollute our water, they filled in public lakes with asphalt and toxic

chemicals, so -- he's talking about a separate issue, but we've been battling with IDEM for years over this, and maybe now we've got the EPA and the Army Corps of Engineers, we might get some result.

But it all goes back to the general gist of this meeting, that industry is polluting us to death in this county, and for IDEM to turn their backs and even allow industry to pollute us more is disgraceful. And it's not just the air; it's the water, it's everything. I've lived there for 34 years, and I have to leave my home on days because Walsh & Kelly is dumping 50 pounds an hour of sulfur dioxide into Calumet township. And that's just one area in --

MR. MURZYN: That's in the neighborhood.

MR. WALTERS: And it's a disgrace that we should even be sitting here listening to IDEM ask us to allow them to pollute us more, and it's just -- it's ridiculous. Your job should be to protect us, not to increase

industry's profits. And condolences to the man from NiSource, but for him to promote this, he's big business. He's industry. He makes money off of dumping sulfur dioxide on us, and that's his position, that's his job.

But anybody that breathes air, anybody, including your grandchildren, are going to feel the repercussions of what you people do now, of what you do now. So, it isn't just us. Go home and look your kids in the eyes tonight and say, "Honey, I allowed another 5,000 tons of sulfur dioxide to be dumped in the area."

You know, maybe your grandchildren will be born funny, because all -- so, you people have got to have a conscience, because you are our representatives. You're supposed to protect us, and you're not doing that. You're buckling in to big business, and everybody here knows that's the bottom line. We know that's the truth.

You changed how pollutants are reported? Give me a break. You've allowed more and more and more pollutants into the

atmosphere, and you reduce and you change the rules for how they're reported. Now the asphalt plant I live next door to, they have now been allowed to report their pollutants aggregately annually. They don't care what their -- so, now I'm getting 500 pounds an hour dumped on me because they don't run an night, so they get to average it in yearly. They don't run over the winter, so they get to add another 50 pounds an hour.

So, you people have changed the rules -- not you personally, but government has changed the rules to allow more pollutants into the atmosphere. Thank God for people like the Sierra Club and the American Lung Association, and even the press at times, that tell us the truth.

But shame on you people from -- you don't have a backbone. You don't have a backbone. And I'm not saying you personally, because Mitch Daniels has rolled the rules over to the point that you can now dump more toxins, but according to your figures, you're dumping

less. But we all know better. My eyes burn all day long because I live in a cloud of sulfur dioxide, and for IDEM to allow plants to go from burning natural gas to burning scrap oil and asphalt is insane.

MS. WATSON: Sir, can we give the floor back to Mr. Murzyn, since I'm not sure he was finished?

MR. WALTERS: I -- he's done. I think so.

MS. WATSON: Did you have anything else you wanted to share with us, sir?

MR. MURZYN: Well, like I said, since 1975 we've been just polluted, and we've -- we've had meetings, we had everything. We formed a club. They broke it up. It's -- I mean by who -- it was just -- it's just a hard thing to fight. I was shoved from office to office up and down Indianapolis. I don't know how many times I've been there on different things, and I get shoved off to this guy.

I'm smelling swamp gas. There's nothing -- you know, it can't be that much

pollutant, and yet I have the papers, the pictures, the whole shot, but yet I get nowhere with it. Why?

MS. WATSON: I would be happy to speak with you after the hearing to see who at IDEM you've spoken with and see if I can help in some way.

MR. MURZYN: Okay. Like I said, I've worked with Mr. Simmons, Letty --

MS. WATSON: Bob Simmons and Letty Zepeta.

MR. MURZYN: -- Martinez and all, but when -- you know, you don't take a reading from a plant when the wind's blowing from the north and put the meter on the north side. It don't make sense. So, it comes up with clean air. You know, things like that.

And then we're just -- it's gotten to the point where our whole neighborhood is just all -- now they've dumped all of this stuff in there. It's leaching out. The guy who took samples of water found out it's full of what; phenols?

MR. WALTERS: Phenols.

MR. MURZYN: Phenols, and they've polluted us now, so -- and we asked them not to do it. We begged them. I've got clippings, newspaper clippings, of what they said, what they've done, and nothing's been done. So, you've got 600 people in the neighborhood that nobody pays attention to. They have no representation. They live in Calumet Township.

It's a joke. I mean you call your councilperson, and they're never around, on vacation or this or that, or they'll get back to you, and you're just slid along. And who's the biggest road paver in Lake County and Porter County? Walsh & Kelly. So, they wield a pretty good club in Lake County, especially in Crown Point.

And that's what we've been battling for this period of time. It's just -- you know, here I can't even speak properly. I'm tense, I'm uptight, and I had a program lined out, and it's just proof.

MS. WATSON: That's okay. I --

MR. MURZYN: But at least I have the proof.

MS. WATSON: Okay.

MR. MURZYN: I have a table flooded with tapes, pictures, the whole shot, and I can't get nothing done.

MS. WATSON: Okay. I'd be glad to follow up with you after the hearing.

MR. MURZYN: That would be great.

MS. WATSON: Okay.

MR. MURZYN: Thank you very much.

THE HEARING OFFICER: Were there any other formal comments concerning the draft redesignation petition and maintenance plan this evening?

(No response.)

THE HEARING OFFICER: If not, these proceedings are hereby concluded and this hearing is adjourned. Again, Kathy and I will remain here, and we'd be happy to talk to you about any questions or concerns that you have about this topic or others.

Thank you.

MS. WATSON: Thank you.

- - -

Thereupon, the proceedings of June 29, 2006 were concluded at 6:34 o'clock p.m.

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CERTIFICATE

I, Lindy L. Meyer, Jr., the undersigned Court Reporter and Notary Public residing in the City of Shelbyville, Shelby County, Indiana, do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me on Thursday, June 29, 2006 in this matter and transcribed by me.

Lindy L. Meyer, Jr., Notary Public in and for the State of Indiana.

My Commission expires October 27, 2008.

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1440 W. Washington Blvd.
Chicago, IL 60607-1878
Phone: (312) 243-2000
Fax: (312) 243-3954
www.lungchicago.org

AMERICAN LUNG ASSOCIATION® of Metropolitan Chicago

July 7, 2006

Kathryn Watson, Chief
Air Programs Branch, Office of Air Quality - Mail Code 61-50
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251
FAX (317) 233-5967

RE: Redesignation Petitions for Lake and Porter Counties, LaPorte County

Dear Ms. Watson:

We write in to express our opposition to an attainment designation for Lake and Porter Counties in Indiana for the 8-hour ozone standard. Great numbers of people suffer from lung disease in those counties as well as neighboring counties. Based on the most recent estimates of prevalence from the American Lung Association, over 44,000 people have asthma in Lake and Porter Counties. Over 440,000 people in Cook County Illinois, which abuts Lake Co Indiana, also have asthma. Thousands of additional people in this region have other lung diseases and are at additional risk of physical harm, added medical expense, lost time from work or school, hospitalization or worse from elevated air pollution levels.

Furthermore, we do not believe the applicable requirements for redesignation have been attained. One provision notes that "A demonstration that improvement in air quality between the year violations occurred and attainment was achieved is based on permanent and enforceable emission reductions and not on temporary adverse economic conditions or unusually favorable meteorology." We do not believe this has been proved. Cool weather for ozone seasons in the three year reporting period used by the State of Indiana has been below long-term averages. For example, as noted by NASA, 2004 Midwest meteorology was particularly cool and below average for all three months of June, July and August – the heart of the ozone season. (http://earthobservatory.nasa.gov/Newsroom/MediaAlerts/2005/2005031118521.html)

Likewise, the state notes that under section 110(k) (iii) that a qualification for attainment is that "the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and

100 Helping Chicago Breathe Easier For 100 Years

Founded in 1906, the American Lung Association of Metropolitan Chicago serves Chicago and Cook County with education, research and advocacy programs.

Member of Community Health Charities– Please remember the ALAMC in your will.

applicable Federal air pollutant control regulations and other permanent and enforceable reductions;" To this point, we would like to echo points made by the Save the Dunes at the recent public hearing on the status of the Dean Mitchell coal fired power plant, located in Lake County. The plant was temporarily closed in 2002, and based on what we know, it could be restarted at any time, including after any ozone attainment designation was awarded. We understand the State Utility Regulatory Commission is revisiting the issue to determine whether to re-open the plant. Mitchell is currently in the SIP inventory, but has not operated for almost 5 years. Should the plant re-open, these emissions could negatively impact air quality, not only in Lake and Porter Counties in Indiana but in neighboring communities of LaPorte County as well as in Cook County, Illinois. Not running the plant has artificially dampened air pollution levels in northwest Indiana, but there is no guarantee that those emissions will not be there in the future. In addition, allowing for the plant to restart after an attainment demonstration and then not requiring a maintenance plan to be implemented until a reading of 89 ppb is recorded would put all area residents in an environment where they would deliberately be exposed to air that fails to meet minimal federal health standards.

The State of Indiana has noted that several requirements must be met for granting attainment status, including "A demonstration that the projected level of emissions is sufficient to maintain the ozone standard." We believe recent modeling done by the Lake Michigan Air Directors Consortium (LADCO) shows exactly the opposite of what the state is requesting. Based on the most recent emission inventories and accepted modeling techniques, sites in Lake, Porter and adjacent counties are still showing ozone nonattainment in 2012. This shows that even if all federal pollution programs now in place or in process will be in effect at that time, ozone violations would still be occurring. This information can be found on LADCO's website at
http://www.ladco.org/reports/rpo/Regional%20Air%20Quality/June%2015,%202006/June15_2006_Weight_EvidencePresentation.pdf

According to USEPA, the deadline for meeting ozone standards in non-attainment counties Lake and Porter is June 2010.
(http://www.epa.gov/ozonedesignations/regions/region5desig.htm)
LaPorte is supposed to be in attainment with the ozone standard by 2007, but that is doubtful based on the modeling from LADCO, which shows that given standard meteorological conditions – not weather conditions

decidedly antithetical to ozone formation - ozone violations could still be expected to occur over at least the next six years. Granting attainment status to Lake and Porter Counties, and erasing the responsibility to reduce emissions beyond that which would be achieved by existing and in-process federal requirements would make it even more difficult to reach attainment further east in downwind LaPorte Co. Likewise the continuous chain of urban areas that reaches from the Michigan border to areas north of Milwaukee still has regional ozone problems that will be harder to achieve if further verifiable and permanent emissions reductions are not made in NW Indiana.

The issue of grid spacing in Midwest attainment modeling has been addressed. LADCO models air quality in the Midwest using a "grid", and a square in that grid can be big (36 km square). States have argued that the big squares are unfairly penalizing them by making the problem appear worse that it really is locally. The most recent LADCO information at the above website compares the 36 km squares with a 4km square grid and examines the difference, but even here LaPorte County STILL fails to meet the ozone standard in 2009, at least two years after it is required to be in attainment according to EPA.

For these reasons we strongly urge the state of Indiana to withdraw its proposal to EPA requesting redesignation of Lake and Porter Counties to attainment for the ozone standard, and failing that, request that EPA deny such petition from the State of Indiana. For the above reasons we also believe the separate petition for LaPorte County to be declared as attainment for the ozone standard is also flawed.

Sincerely,

Brian Urbaszewski
Director of Environmental Health Programs
American Lung Association of Metropolitan Chicago

Faith Bugel
Staff Attorney
Environmental Law and Policy Center of the Midwest

Improving Kids' Environment

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July 7, 2006

Kathryn Watson, Branch Chief
Office of Air Quality
Mail Code 61-50
Indiana Department of Environmental Management
100 N. Senate Ave.
Indianapolis, IN 46206-2251

Re: Redesignation Petition and Maintenance Plan for Lake and Porter Counties Indiana

Dear Ms. Watson:

On behalf of Improving Kids' Environment, Inc., I am writing to express IKE's objection to the Indiana Department of Environmental Management's intent to seek redesignation of Lake and Porter Counties, Indiana, to the status of maintenance counties for the 8 hour ozone standard. Redesignation of the Indiana counties is not the best way to achieve public health and economic goals for the region, and will undermine the 15 year commitment among the Lake Michigan states to work collectively to solve this regional challenge. Improving Kids' Environment, Inc. is a not-for-profit organization that works to reduce environmental threats to children's health in Indiana. IKE appreciates the opportunity to provide these comments to you and Commissioner Easterly.

IKE shares IDEM's interest in lessening the economic development impacts of a nonattainment designation. However, the best way to address the burdens caused by the nonattainment designation in this case is to seek changes in federal policy that allow sound economic development projects to go forward in a reasonable fashion while progressive, cooperative efforts continue to address the public health issues. IKE would support IDEM in this type of discussion.

Ozone is a lung irritant, and can trigger an asthma attack or cause other respiratory symptoms, especially in children, the elderly, and those with lung or heart disease. High ozone levels adversely affect children with asthma throughout the Lake Michigan region. According to the 2004 report "The Burden of Asthma in Indiana," compiled by the Indiana State Department of Health and the Indiana Joint Asthma Coalition, 4162 of children enrolled in Medicaid in FY03 in Lake County and 522 children in Porter County had been diagnosed with asthma—10.5% and 10.4% of the total number of children on Medicaid.[1] This is comparable to the statewide average for

[1] http://www.in.gov/isdh/programs/asthma/pdfs/BurdenAsthmaIndiana1-24-05.pdf, accessed July 3, 2006.

children enrolled in Medicaid, but there is a greater proportion of children enrolled in Medicaid in Lake County than in the state as a whole. The Asthma Burden Report found, at page 9, that low income Hoosiers were twice as likely to have asthma as Hoosiers with annual household incomes of $25,000 or more. In Lake County, the second most populous county in Indiana, 12.7% of the population is considered low income, according to US Census Bureau figures, compared to a statewide poverty rate of 10%.[2] Therefore, while childhood asthma is a serious health concern throughout the state, it has an extra impact in this region because of the local demographics.

Indiana and other states in the eastern United States have been battling ozone for several decades, and have made substantial progress with programs to reduce motor vehicle emissions, power plant emissions, and programs that address local emissions (such as local industry controls, cleaner fuels and the like). The number of days each summer when ozone levels are unhealthy has been declining in recent years, and the ozone levels on those unhealthy days are much lower than they used to be a decade ago. This is good news for the citizens of Lake and Porter Counties. There is no doubt that significant decreases in emissions from motor vehicles, industry and other activities have contributed to this improvement in air quality. It is also clear that regulatory programs continue to be implemented that will further reduce emissions of ozone precursors.

IKE appreciates the public policy reasons why the Indiana Department of Environmental Management is seeking redesignation. However, for the reasons stated below, IKE cannot at this time support redesignating the two counties to maintenance status.

The Best Approach to Improved Air Quality and Economic Success In Northwest Indiana Is a Regional Approach. Lake and Porter Counties are an integral part of the southern Lake Michigan area economy and airshed. Maintaining a strong economy and satisfactory air quality in this region has long been recognized to require close cooperation among all four states. In the 1980s, Wisconsin and Illinois were pointing fingers at each other in federal court about who was responsible for the high levels of smog in one of the nation's most populous urban areas. At that time, Indiana was also unwilling to address emissions that were contributing to unhealthy air outside the state. Because ozone is a regional pollutant, caused by emissions over a wide geographic area, good air quality measured at a monitor in Gary does not mean that Indiana industry and motorists are not contributing to someone else's poor air quality. The truth is that all four states in the region contribute to the occasional poor air quality. By the late 1980s, the four states put their differences behind them, dropped litigation and formed a partnership through the Lake Michigan Air Directors Consortium, an organization through which Indiana, Illinois, Michigan and Wisconsin could work together, first to understand the complex behavior of air pollution in the Lake Michigan region and second to collectively develop and implement appropriate plans to improve air quality, with each state taking responsibility for its contributions to the problem.

The four states have worked well together for over 15 years and cooperatively made great strides in improving air quality in the region. It is critical that the attainment designations for areas of the four states remain coupled until the mutual air quality challenge is met in all four states in the most cost-effective, equitable and efficient manner possible. The alternative of lawsuits under the Clean Air Act between states is worse for all concerned.

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[2] http://quickfacts.census.gov/qfd/states/18000.html, accessed July 3, 2006.

It is critical that the State of Indiana not break ranks with Illinois and the other states on this regional effort. A separation now will impair Indiana's ability to work cooperatively to encourage other states to make reductions that help us on ozone and on solving our other pressing regional environmental challenges to public health and to economic viability such as fine particle pollution.

Activities in Lake and Porter Counties Contribute Significantly to Areas Downwind. The Petition incorrectly asserts that emissions from Lake and Porter Counties make a minimal contribution to downwind areas. Tables in the Petition show that individual categories of emissions (e.g., motor vehicles, power plants, etc.) contribute at most 3.7% of the ozone at downwind monitors in Michigan and Wisconsin. Given how close many of the monitors are to exceeding the health standard, this level of contribution is indeed significant. Moreover, the important number is not the percentage from an individual source category, but rather the **total** contribution from Indiana sources, when all categories are added together. When emissions are totaled, the contribution from Lake and Porter Counties is 10.61% to the monitor in Holland, Michigan; 13.63% to the monitor in Coloma, Michigan; 6.88% to the monitor in Chiwaukee, Wisconsin; and 10.01% to the monitor in South Milwaukee, Wisconsin. See Petition at 38-39. The contributions in parts per million to these monitors are .009 (Holland), .0106 (Coloma), .0060 (Chiwaukee) and .0081 (South Milwaukee). Table 7.5, Petition at 37. These data show that emissions from Lake and Porter Counties are still contributing significant amounts of pollution to neighboring states.

The Air Quality Data Do Not Support Redesignation At This Time. In order to seek redesignation, Indiana must show that the area meets the ozone health standard. This standard is met if the average of the 4th high ozone values from the most recent three year period from each monitor is less than 85 parts per billion (ppb). Indiana's monitoring data only meet that test because of the extraordinarily cool weather in 2004. Of the five ozone monitors in Lake and Porter Counties, four of them had a 4th high value greater than 85 ppb in 2005 (ranging from 87 ppb to 90 ppb). Had the weather not been so unusually cool in 2004,[3] it is highly unlikely that all of the monitors would have met the standard.

Furthermore, the ozone monitor considered by USEPA to be the "design monitor" for the regional nonattainment area, in Chiwaukee, Wisconsin does not currently meet the ozone standard. As noted above, emissions from Lake and Porter Counties do contribute significantly to ozone levels downwind. The Chiwaukee monitor must be considered in determining whether it is appropriate to disengage northwest Indiana from the regional air quality planning process.

In conclusion, IKE urges IDEM to work with Illinois, Wisconsin and Michigan in a continued joint effort to improve air quality and, ultimately, a joint petition for redesignation. When it is clear that all areas within the airshed to which Indiana and Illinois sources contribute substantially are meeting the health standard under typical weather conditions, and if Illinois and Indiana can make a joint request, IKE believes that a redesignation petition will be more appropriate and defensible.

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[3] According to the Petition, the average number of days where temperatures exceeded 90° F is 17.5 at the Lowell monitoring station in Lake County. The number of ≥ 90° days in 2003, 2204, and 2005 was 8, 4, and 38 respectively. Throughout the Midwest region, weather conditions in 2004 were unusually cool and cloudy, with unsurprisingly low ozone levels throughout the region as well.

Again, thank you for the opportunity to submit these comments. If you have any questions, please don't hesitate to contact me.

Very truly yours,

Janet G. McCabe
Executive Director

cc: Dick van Frank
Bharat Mathur, USEPA Region V

1453 North Tremont Road
Chesterton, IN 4304
July 7, 2006

Ms. Kathryn Watson, Branch Chief
Office of Air Quality
Mail Code 61-50
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46206-2251

Re: **Redesignation Petition and Maintenance Plan for Lake and Porter Counties, Indiana**

Dear Ms. Watson:

I have participated in the Air Quality Subcommittee of the Northwestern Indiana Planning Commission on behalf of Save the Dunes Council, but I am submitting these comments on my own behalf. I support the comments opposing the redesignation request submitted by Save the Dunes Council and those submitted by Improving Kids Environment. I personally oppose the petition as well.

For nearly two years the AirQuality Subcommittee, working with IDEM, worked through issues regarding the region's ozone nonattainment status and ultimately proposed local measures to assist Lake and Porter Counties into moving toward attaining the 8-hour ozone standard. These were finalized and sent to Commissioner Easterly late last year.

As noted in the December 19, 2005 minutes of the Air Quality Subcommittee, IDEM's plans to request redesignation of Lake and Porter Counties to attainment for the ozone standard were explained at that meeting along with the companion request to separate our local nonattainment area from the great Chicago nonattainment area. We were told this was done in response to the favorable monitoring data from 2004.

IDEM's own modeling data included in the culpability analysis section of this petition indicates that Lake and Porter County emissions will continue to contribute to ozone violations elsewhere in the greater nonattainment area. It is clear that we are and must remain part of the regional airshed.

The LADCO/MRPO May 2006 Air Quality Newsletter reported on their Round 4 modeled design values for 2008, 2009, 20012, and 2118 using several "on the books" control strategies such as CAIR, EGU 1 and EGU 2. They concluded that while air quality would be improved substantially in both 2009 and 2012, these controls would not be enough to meet the ambient standards everywhere by 2009, and residual nonattainment problems would continue in 2012.

I continue to be concerned that IDEM proposed an ozone warning trigger of 89 ppm for the LaPorte County petition and for this Lake and Porter County petition. It will be an issue for Lake and Porter Counties only if EPA approves this petition which I hope will not be approved by EPA at this time. I also urge that IDEM seek authority to use emergency rule making if and when data for any of the state's maintenance plans show that an action level has been triggered.

Our local air quality has improved substantially. This is due largely to the combined efforts of the state and federal agencies, the regulated community, the environmental community, NIRPC, and ordinary citizens . Eventually a petition to seek redesignation will be supported by regionwide data . I look forward to that day.

Sincerely,

Charlotte J. Read

Charlotte J. Read

Untitled

Kathryn Watson,

It is hard enough to breath here in northern Porter county as it is. Pollution blows in from Illinois, and elsewhere all the time; there is plenty of it here, home grown. Lifting the pollution stopping requirements for industries and keeping the burden on the "little people" is just the kind of stuff we tax paying voting citizens have come to expect and cringe at from this Republican bunch that is -currently- in POWER in Indianapolis.
There is no way that loosening the current rules will help anyone save the top .05% rich investors, which -AIN'T- living in Lake nor Porter counties anyway.
Leave us breath, leave us be a bit healthy. Let the top .05% rich investors struggle on with what they have.
Do not degrade my atmosphere! Do not change the designation for ozone from non-attainment to attainment status.
There are too many of we citizens watching too closely for sneaks to slip vile, horrid changes on us. There are too many of we citizens that have caught on to the politics of greed.
We vote! Heed my warning, or suffer at the poles! Votes count! Viva democracy! Long live the U.S.A. in FREEDOM!

Thomas CC Smith
Porter County
Indiana
5th generation
9:23 PM 7/4/2006

TCS

NORTHWEST INDIANA FORUM, INC.

6100 SOUTHPORT • PORTAGE, INDIANA 46368 • 219.763.6303 • 219.763.2653 FAX

July 7, 2006

SENT VIA FACSIMILE: 317.233.5967

Kathryn Watson, Chief
Office of Air Quality
Air Programs Branch, Mail Code 61-50
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

RE: Support of Proposed 8-Hour Ozone Redesignation Petition by the State of Indiana

Dear Ms. Watson,

On behalf of the members of the Northwest Indiana Forum, the Northwest Indiana Forum Environmental Committee recommends the support of the request forwarded by Governor Daniels and Commissioner Tom Easterly to pursue the Redesignation of Lake and Porter Counties for 8 Hour Ozone Attainment status.

The Indiana Department of Environmental Management has accumulated statistical records of compliance for Lake and Porter Counties with regards to the 8 hour Ozone standard to warrant a Redesignation to attainment for those counties. Utilizing the required demonstration procedure, IDEM has documented that

- the request is not based upon a temporary reduction or unusual meteorological occurrences
- a maintenance plan has been developed which includes action steps
- existing requirements will not be repealed
- facilities will still be subject to PSD requirements

The Redesignation request reflects the emissions control efforts and compliance records of existing Lake and Porter Counties industries in addition to other air quality initiative efforts.

It is important to note that safeguards have been developed and are in place for protective purposes. Industries and environmental stakeholders have been working collaboratively through the efforts of the Forum's Environmental Committee and the NIRPC Air Quality Steering Committee to focus upon these issues.

The Redesignation request allows Northwest Indiana to showcase the improvements to air quality as a significant component of improvement in quality of life issues. An outcome of the Redesignation will include the removal of offset requirements for new and/or expanding industries in the affected counties thereby creating a positive economic development atmosphere in Northwest Indiana.

Sincerely,

Kay L. Nelson
Director, Environmental Affairs
Northwest Indiana Forum

1453 North Tremont Road
Chesterton, IN 4304
July 7, 2006

Ms. Kathryn Watson, Branch Chief
Office of Air Quality
Mail Code 61-50
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46206-2251

Re: **Redesignation Petition and Maintenance Plan for Lake and Porter Counties, Indiana**

Dear Ms. Watson:

I have participated in the Air Quality Subcommittee of the Northwestern Indiana Planning Commission on behalf of Save the Dunes Council, but I am submitting these comments on my own behalf. I support the comments opposing the redesignation request submitted by Save the Dunes Council and those submitted by Improving Kids Environment. I personally oppose the petition as well.

For nearly two years the AirQuality Subcommittee, working with IDEM, worked through issues regarding the region's ozone nonattainment status and ultimately proposed local measures to assist Lake and Porter Counties into moving toward attaining the 8-hour ozone standard. These were finalized and sent to Commissioner Easterly late last year.

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IDEM's own modeling data included in the culpability analysis section of this petition indicates that Lake and Porter County emissions will continue to contribute to ozone violations elsewhere in the greater nonattainment area. It is clear that we are and must remain part of the regional airshed.

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I continue to be concerned that IDEM proposed an ozone warning trigger of 89 ppm for the LaPorte County petition and for this Lake and Porter County petition. It will be an issue for Lake and Porter Counties only if EPA approves this petition which I hope will not be approved by EPA at this time. I also urge that IDEM seek authority to use emergency rule making if and when data for any of the state's maintenance plans show that an action level has been triggered.

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Sincerely,

Charlotte J. Read

Charlotte J. Read

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary

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June 19, 2006

Kathryn Watson, Chief
Air Programs Branch - Office of Air Quality - Mail Code 61-50
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46206-2251

Subject: Lake and Porter Counties Redesignation Petition and Maintenance Plan

Dear Ms. Watson:

The Wisconsin Department of Natural Resources (WDNR) has significant concerns regarding the Indiana Department of Environmental Management (IDEM) Redesignation Petition and Maintenance Plan for Lake and Porter Counties. IDEM has solicited written comments on the draft through July 7, 2006. According to the draft proposal IDEM would request that US-EPA redesignate Lake and Porter Counties in northwest Indiana to attainment status for the 8-hour ozone standard. I am submitting this letter for the public record in opposition to the proposal. WDNR believes that the proposed redesignation is inconsistent with the Clean Air Act and EPA's nonattainment regulations. Accordingly, WDNR requests that IDEM withdraw its draft redesignation proposal.

Lake and Porter Counties are part of the Chicago-Gary-Lake CO-IN non-attainment area and they directly contribute air pollutants in significant quantities to the greater Chicago, and greater Milwaukee non-attainment areas and other nearby nonattainment areas around the Lake Michigan shoreline. Emission control efforts involving sources in Lake and Porter counties will be integral to developing any comprehensive attainment demonstration for all parts of the Lake Michigan non-attainment area and for other directly adjacent nonattainment areas downwind. The Chiwaukee Prairie monitor in southeast Wisconsin has been formally identified by EPA within the designation decision letters as the "design" monitor for both the IL-IN and WI ozone nonattainment areas since the early 1990s.

The Clean Air Act and EPA's ozone regulations and guidance documents identify the regional nature of the ozone problem. Indiana's redesignation proposal does not recognize that Indiana emissions are a significant contributor to the continued real and modeled violations of the ozone standard in the Lake Michigan region. The projected 5 ppb contribution in 2009 and 2012 in Southeast Wisconsin exceeds EPA's assessment of what constitutes a "significant interstate contribution" and much of that contribution is based on emissions that originate from the NW Indiana counties. IDEM does not propose a strategy for reduction of NOx and VOC emissions that is of a magnitude and in a timeframe adequate to demonstrate attainment at all the critical monitors significantly impacted by the emissions from Lake and Porter Counties.

EPA has a clear and well-established record regarding nonattainment designations for major metropolitan areas that have a history of serious or worse nonattainment status. EPA interpretations have also been supported by the clear language of the Clean Air Act that acknowledges the need to address

nonattainment issues for ozone in a broad geographic context due to the secondary formation nature of the pollutant. More specifically, for the last 15+ years EPA has recognized under both the 1-hour and 8-hour ozone standards that the critical design monitor for both the Chicago-Gary-Lake Co IL-IN and the Milwaukee-Racine Area - WI non-attainment areas is the Chiwaukee Prairie monitor which is located just north of the boundary of Illinois and Wisconsin near to the Lake Michigan shoreline. It is Wisconsin's understanding, based on extensive regional air quality modeling over the last two years, that the Chiwaukee monitor is not projected to reach a modeled level of attainment by 2009, based on existing programs.

The implications of Indiana's proposed redesignation request for Wisconsin citizens and industry are very significant. The proposed re-designation would create an un-level playing field for industrial development and new source growth across the EPA-designated non-attainment area. The excess ozone likely to result from the exclusion of Indiana sources could necessitate additional requirements for Wisconsin facilities in order to make up the air quality shortfall.

EPA approval of the requested action would set an unacceptable precedent for emission control program decisions in other states. For example, Illinois' relative contribution to the southeast Wisconsin ozone problem surpasses the combined impact of Indiana and Wisconsin. However, like Lake and Porter counties, Illinois also does not currently monitor ozone violation levels directly inside its nonattainment counties associated with Chicago. Without significant effort by both Illinois and Indiana, any potential for a Lake Michigan regional attainment demonstration will be difficult, if not impossible.

The Wisconsin Department of Natural Resources respectfully opposes this redesignation request because it is contrary to the requirements of the Clean Air Act. We believe that the counties cannot be re-designated until there is a regional demonstration of attainment for all the directly affected critical monitors.

Sincerely,

Scott Hassett, Secretary
Wisconsin Department of Natural Resources

Cc: Governor James Doyle, WI
Peggy A. Lautenschlager, Attorney General, WI
Bharat Mathur, Acting Administrator, US-EPA-Region 5
Thomas W. Easterly, Commissioner, IN-DEM
Douglas P. Scott, Director, IL-EPA
Steven E. Chester, Director, MI-DEQ
Joseph P. Konselik, OH-EPA

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

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July 7, 2006

Ms. Kathryn Watson, Chief
Air Programs Branch, Office of Air Quality - Mail Code 61-50
Indiana Department of Environmental Management
Indianapolis, Indiana 46206-2251

Re. Redesignation Petition and Maintenance Plan for Lake and Porter Counties

Dear Ms. Watson:

The Illinois Environmental Protection Agency (Illinois EPA) appreciates the opportunity to provide comments on the State of Indiana's "Request for Redesignation and Maintenance Plan for Ozone Attainment in the 8-Hour Ozone Nonattainment Area" (May 2006). The request seeks to redesignate two Indiana counties, Lake and Porter, as attainment for the 8-hour ozone National Ambient Air Quality Standard (NAAQS). As you know, the states of Indiana, Illinois, Wisconsin, Michigan, and Ohio have worked cooperatively for many years to improve air quality throughout the Lake Michigan region. Although air quality has greatly improved as a result of our joint efforts, violations of the 8-hour ozone NAAQS are still occurring in our region. We believe that emissions from Lake and Porter counties contribute significantly to ongoing violations of the ozone standard and that further emission reductions will be required beyond those currently contained in Indiana's State Implementation Plan. The Illinois EPA, therefore, strongly opposes Indiana's redesignation petition and will recommend to the United States Environmental Protection Agency (U.S. EPA) that this petition be denied, and that Lake and Porter counties remain designated as nonattainment until the 8-hour ozone NAAQS is achieved in the entire Lake Michigan region.

In 1991, the State of Indiana, in conjunction with the states of Illinois, Michigan, and Wisconsin, signed a Memorandum of Agreement (MOA) which committed the four states to work cooperatively to improve ozone air quality in the Lake Michigan region. The 1991 MOA established the Lake Michigan Air Directors Consortium (LADCO) to coordinate technical and policy developments needed to meet this challenge. The level of cooperation between the LADCO states and the success of those efforts to improve air quality as a result of this multi-state agreement are unprecedented. The four states have reaffirmed this commitment a number of times since 1991, most recently in 2004, when a

new MOA was signed by the four states to include the State of Ohio in the collaborative planning process. The 2004 MOA "reaffirms the cooperative effort by the states and the U.S. EPA to ... identify, evaluate, and implement sufficient emission reductions to provide for attainment of the NAAQS for 8-hour ozone and PM2.5 and achieve the reasonable progress goals for regional haze throughout the five state region."

This work is not completed. As Indiana's petition notes, 8-hour ozone concentrations exceeding the level of the NAAQS have been measured in southeast Wisconsin during the most recent 3-year period, 2003-2005. Modeling performed by LADCO indicates that the 8-hour ozone standard will not be achieved in southeastern Wisconsin in the near future without additional control measures beyond those currently required by the Clean Air Act. The LADCO states have not yet reached consensus on the measures to be implemented, whether local or regional in nature. The modeling also indicates that Lake and Porter Counties contribute 6 – 8 parts per billion (ppb) of ozone in southeastern Wisconsin, 7 – 10% of the total ozone concentration. Emissions from Lake and Porter counties constitute 15% of the nonattainment area's VOC emissions (including emissions from Indiana and Illinois counties included in the NAA), and 20% of the total NOx emissions for the nonattainment area. There is no technical basis for Indiana's claims that these contributions are "insignificant."

For its NOx SIP Call rulemaking, U.S. EPA considered a 2 ppb contribution from an entire state a significant contribution for 1-hour ozone. For the Clean Air Interstate rule, U.S. EPA used a state contribution of 3 ppb as the criterion for establishing significance of downwind impacts. In both rulemakings, U.S. EPA concluded that emissions from sources in Indiana contributed at levels greater than these thresholds to downwind nonattainment areas, including the nonattainment area in southeast Wisconsin. LADCO's modeling, as cited in Indiana's petition, demonstrate that Lake and Porter counties by themselves contribute amounts that are greater than U.S. EPA's thresholds for entire states.

Lake and Porter counties are tied to the Illinois nonattainment counties geographically and economically, and reside in the same lakeshore environment. U.S.EPA guidance clearly states that these factors must be considered when the states recommend the boundaries of a nonattainment area. (See: "Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standard", USEPA, March 28 2000). U.S. EPA properly considered these factors in determining the reasonableness of the nonattainment area boundaries when the boundaries were finalized in 2004.

In summary, there is no technical or legal basis for Indiana's contention that emissions from Lake and Porter counties do not contribute significantly to ongoing violations of the ozone standard in the region and that further emission reductions from these counties is not warranted. The Illinois EPA, therefore, strongly opposes Indiana's redesignation petition and will recommend to the U.S. EPA that this petition be denied. Indiana should withdraw its draft redesignation proposal and Lake and Porter counties should remain

nonattainment until the 8-hour ozone air quality standard is achieved in the entire Lake Michigan region.

Sincerely,

Laurel L. Kroack, Chief
Bureau of Air

cc: Cheryl Newton, Acting Director, Air and Radiation Division, U.S. EPA Region 5
Tom W. Easterly, Commissioner, IN-IDEM
Paul Dubenetsky, Assistant Commissioner/OAM IDEM
Kevin Kessler, Acting Director, Bureau Air Management, WI-DNR
H. Vincent Hellwig, Chief Air Quality Division, MI-DEQ
Robert Hodanbosi, Chief, Division of Air Pollution, OH-EPA

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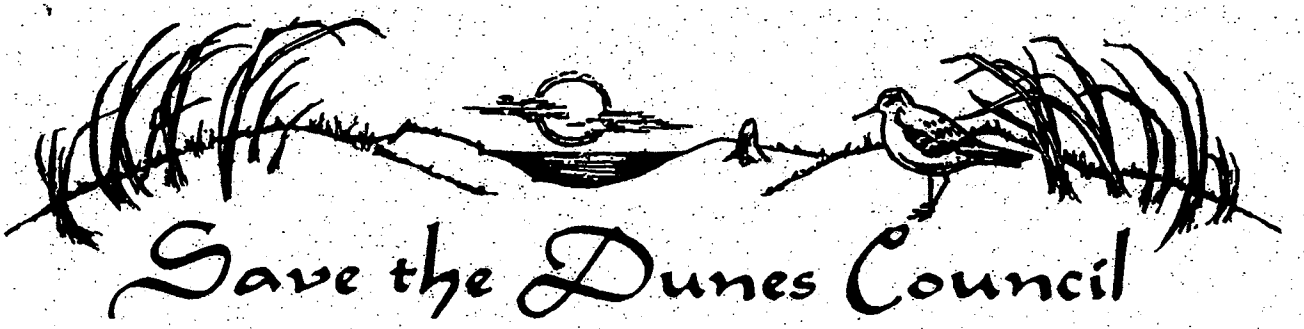


444 Barker Road, Michigan City, IN 46360 • 219-879-3937 • www.savedunes.org

July 7, 2006

Ms. Kathryn Watson, Chief
Air Programs Branch
Office of Air Quality – Mail Code 61-50
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46206-2251

Re: Redesignation Petition and Maintenance Plan for Lake and Porter Counties

Dear Kathryn,

The Save the Dunes Council appreciates the opportunity to address air quality issues in Northwest Indiana. The Council has worked with the Indiana Department of Environmental Management (IDEM) for years to reduce pollution and improve air quality. We are encouraged by the air quality improvements to date and future reductions, which will happen because of the Clean Air Interstate Rule (CAIR).

However, we have serious concerns about redesignating Lake and Porter Counties as attainment for ozone and have attached a detailed listing of those concerns for your review. Based on these reasons, and others being prepared, Save the Dunes is urging Indiana to withdraw the Petition for Redesignation to EPA.

While Save the Dunes acknowledges IDEM's continued efforts to reduce air pollution, the improvement in air quality requires regional cooperation, and current collaborations towards this goal should not be overlooked or minimized.

Once again, thank you for this opportunity to respond to IDEM's petition for the redesignation of *attainment status* for Lake and Porter Counties, and we look forward to having the concerns raised in this letter addressed.

Sincerely,

Susan MiHalo

Susan MiHalo
President

SM/cmc

Attachment

Following is an outline of the concerns raised by Save the Dunes at the public hearing for the redesignation petition for Lake and Porter Counties:

1. There is uncertainty over a major source of NOx and SO2 in Lake County. The Dean Mitchell power plant, located in Gary along the Lake Michigan lakefront was closed in 2002. Now, a recent settlement before the IURC is revisiting the issue to determine whether to re-open the plant. Mitchell is currently in the SIP inventory, but has not operated for almost 5 years. Should the plant re-open, these emissions could negatively impact air quality.

2. Should the petition be granted, Northwest Indiana will loose the current offset provision which requires new sources to offset increased emissions. We understand this would not be required as an "attainment area."

3. It is our belief that the threshold for the trigger for the maintenance plan is too high. At 89 ppb, this is over the current standard.

4. Unusual weather occurrences should be considered, regardless of the fact that you are using three-year averages. We have had relatively cool summers the past two years, especially in 2004. Even considering those cool years, the 4th highest readings for Gary was 0.089, for Hammond was 0.087, and for Ogden Dunes was 0.090. To protect public health there needs to be a margin of safety should the climate continue to get warmer, as indicated by recent news reports about global warming.

Also, making unsubstantiated statements in the petition, such as "Ozone formation in the future will be influenced less by meteorological conditions," on page 43 is misleading. Instead, IDEM should have stated that the longer averaging time and the averaging of three years' data reduce the influence of unusual meteorological conditions in any given year. But this still does not take into account unusual weather conditions that may occur over a period of years. How often do you hear about a 1-year drought? Weather just does not work that way.

5. There are many new sources proposed for Northwest Indiana including large intermodal surface transportation facilities, increased airport development, and a new power plant now under study. The impact from these developments must be considered as part of any redesignation effort.

In addition, this petition ignores new sources that may develop in the Chicago Metropolitan area that may adversely affect our ambient air standard. Lake and Porter Counties do not exist on an island unto themselves. Cook County has received an "F" on Ozone in the American Lung Association's 2006 State of the Air Report. Incidentally, Lake County and Porter Counties also received an "F's" in this report.

Breaking these counties from the Chicago Metropolitan area also would create incentives for additional sprawl development in Lake County, and more particularly, Porter County, according to a report provided to the U.S. Congress by the Congressional Research Service of the Library of Congress in 2004. That is one of the reasons why Metropolitan Statistical Areas were created for attainment, according to this report.

6. Pulling out of the current regional effort to achieve attainment status is counterproductive to the regional and interstate cooperation to improve air quality. It sends a message to the rest of the region that all the work that we have done together over the years toward achieving attainment is meaningless.

7. Save the Dunes also feel compelled to remind everyone that the Indiana Dunes National Lakeshore lies in these counties. According to the EPA, ground-level ozone interferes with the ability of plants to produce and store food, so that growth, reproduction and overall plant health are compromised. By weakening sensitive vegetation, ozone makes plants more susceptible to disease. These effects can significantly decrease the natural beauty of an area, such as the Indiana Dunes National Lakeshore.

Based on these reasons, and others being prepared, Save the Dunes is urging Indiana to withdraw the Petition for Redesignation to EPA.

7-6-06

Kathryn Watson, Chief
Air Programs Branch, Office of Air Quality - Mail Code 61-50
100 North Senate Avenue
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

Dear Ms. Watson:

The Dunelands Group of the Hoosier Chapter of the Sierra Club would like to make the following public comments on the Request for Redesignation and Maintenance Plan for Ozone Attainment in the 8-hour Ozone Non-Attainment Area in Lake and Porter Counties.

Because the American Lung Association gave Lake and Porter Counties an "F" for ozone in their 2006 State of the Air Report, we think they should not be redesignated to attainment for 8-hour ozone. Throwing out the 3 highest readings per monitor each year seems like an arbitrary way of lowering the tested ozone readings to make them look good when they are not good. The way ground-level ozone is officially measured for IDEM recording is not as good as measuring actual health effects like the American Lung Association grading system. Though the air in Lake and Porter Counties is better than in the 1960's, it still isn't as healthy as it should be.

Separating out Lake and Porter Counties as attainment, apart from the Chicago metropolitan statistical area, which is a major part of the air shed, sets a bad precedent. This will further encourage sprawl, which by its nature is auto-dependent and air and water polluting. Lake and Porter Counties already have too much sprawl.

The 89 parts per billion trigger for the maintenance plan is too high, already over the current standard.

We are very concerned about new sources of pollution that would be allowed with no offset or mitigation that would come with redesignation to attainment. Big sources of air pollution in the future might include the south suburban (Illiana) expressway, Gary airport expansion, an intermodal (truck transfer) facility, reopening the dirty old Dean Mitchell power plant, and continued sprawl. No net gain of pollution is the best policy for the people that breathe the air here.

Please reject the redesignation to attainment. Increasing pollution is not sustainable development.

Sincerely,

Sandy O'Brien, group chair
Dunelands Sierra, 5500 S. Liverpool Rd, Hobart, IN 46342 ecorealm@msn.com

To: Kathryn Watson. Chief
Air Programs, Office of Air Quality

Dear Ms. Watson:

The Save the Dunes organization has just informed us of the proposed plan re-designate Lake and Porter Counties as "attainment for ozone pollution".

Save the Dunes has listed the reasons for opposition for the re-designation so it would be redundant to restate their position here. The facts are cogent, precise, and articulated.

My own view is tempered by what the July/August edition of Sierra magazine states concerning air pollution in the greater Chicago area. While it is true that this article concerns the larger aspects of air pollution, not just the ozone quality, the facts which have been found by such admirable and scientific groups such as Harvard University cannot be ignored. I would draw your attention to this article on pp 57 - 59.
A few brief quotes from the article seem to be particularly cogent in considering the possible effects of a further degradation of air quality in our area:

p. 58. "30,000 people die each year from power-plant pollution alone, according to a study by a firm that trains EPA staffers - almost twice as many as are killed by drunk drivers and 50% more than are murdered."

p. 58. "A Harvard University study found that 100,000 heart-disease deaths each year are believed to be caused by contaminants in the air."

p.58. " an estimated 300,000 babies are born each year with dangerous levels of the toxic metal mercury, which is linked to learning disabilities and lowered IQs. The resulting loss of adult productivity, according to a recent study by researchers from the Mt. Sinai School of Medicine and Harvard Medical School, costs the nation $8.7 billion annually. Another study by some of the same researchers calculated the total healthcare cost of pollution's effects on children at $55 billion per year, more than the Bush administration's current budget request for the Iraq war. Yet despite our growing knowledge about the carnage pollution causes, there is scant political will to anything about it."

This is only a tiny fraction of course of what is in the article. Even IF, a big IF, only a portion of what is contained in the article is true there seems to me to be every reason why our government should be doing much more to enforce the present laws and of course - the purpose of this letter - to certainly NOT DO ANYTHING which might enhance the already distressingly poor quality of air which we breath.

A personal note. Myself and much of my family - as well as so many of the people I know - ALREADY suffer from sinus problems. It is my belief that these are caused by air pollution as when I travel to other areas of the U. S. and the world, these problems disappear.

YOU are in a position to do something about it. For the sake of yourself and your family as well as the rest of society, it is my earnest hope that you will do EVERYTHING in your power to alleviate these problems. Only you and people like you have the power to make change for the better. Please do.

Sincerely yours,
Gordon Wilder
8434 Delaware Street
Highland, IN 46322
Gbwilder29@cs.com
July 2, 2006

United States Steel Corporation
Gary Works
One North Broadway
Gary, IN 46402-3199

July 5, 2006

Lake and Porter Counties Redesignation Petition and Maintenance Plan
Kathryn Watson, Chief
Air Programs Branch
Office of Air Quality – Mail Code 61-50
100 North Senate Avenue
Indiana Dept. of Environmental Management
Indianapolis, Indiana 46206-2251

RE: U. S. Steel Comments – Draft Rules Re-designating Lake and Porter Counties to Attainment of the 8-Ozone NAAQS

Dear Ms. Watson:

U. S. Steel appreciates the opportunity to comment on the above referenced proposed re-designation petition. We hope these comments are helpful and provide constructive ideas on the proposed Re-designation Petition and Maintenance Plan.

The proposed re-designation provides formal acknowledgement and public recognition that the numerous emission control measures that have been imposed since the enactment of the 1990 Clean Air Act Amendments have significantly improved the air quality in Northwest Indiana. U. S. Steel therefore supports the proposed re-designation of Lake and Porter counties to attainment of the 8-hour ozone National Ambient Air Quality Standards (NAAQS).

Lake and Porter counties have demonstrated attainment with the 8-hour ozone NAAQS through a combination of measures enacted to reduce local ozone precursor emissions, and more recently, through additional reductions from regional emission reduction programs. The overall downward trends in precursor emissions and actual ozone concentrations are expected to continue, driven by additional emission reduction measures anticipated to occur as the Clean Air Interstate Rule (CAIR) and other federal measures are implemented in the near future.

One of the requirements of the Ozone Re-designation and Maintenance plan is a commitment to expeditiously implement contingency measures upon the occurrence of monitored ozone levels at or above specified thresholds. We believe the process as outlined in the proposed re-designation package to trigger "Warning Level Response" and the "Action Level Response" action is an appropriate measure, but recommend

one modification. That modification should be to require that data used to trigger a response action are values that have undergone and passed the appropriate quality assurance and quality control procedures. Use of QA/QCed data will assure that response actions are undertaken based on legitimate air quality readings of concern.

If you or your staff has any questions, please do not hesitate to contact me at 219-888 4500.

Very truly yours,

Kenneth L. Mentzel
Manager, Environmental Control
U. S. Steel Gary Works

cc File
D. Behrens
J. Alexander

Summary of Public Comments Received

Public Hearing (June 29, 2006)

Mark Strimbu, NiSource/Northwest Indiana Air Quality Steering Committee

- Local, regional and national emission reduction efforts have improved air quality and allowed the area to attain the ozone standard.

- IDEM's efforts to proceed with redesignation is greatly appreciated, as are the efforts of the Air Quality Steering Committee.

IDEM agrees that improved air quality is a direct result of the implementation of emission control measures at the local, regional, and national level. IDEM appreciates the support of local stakeholders and the contributions of the Air Quality Steering Committee.

Susan MiHalo, Save the Dunes Council

- While Save the Dunes Council acknowledges significant improvement in the monitored ozone levels in Northwest Indiana, there are too many unanswered questions and it is too premature to move forward with redesignation. There is uncertainty over a major source of NOx and SO2 in Lake County. The Dean Mitchell power plant, located in Gary along the Lake Michigan lakefront was closed in 2002. Now, a recent settlement before the IURC is revisiting the issue to determine whether to re-open the plant. Mitchell is currently in the SIP inventory, but has not operated for almost 5 years. Should the plant re-open, these emissions could negatively impact air quality.

The Mitchell plant would most likely be subject to major new source review if it were ever to operate as an economically viable generating station. At a minimum, that would require the installation of best available control technology (BACT) and a demonstration that its emissions would not cause or contribute to a violation of any National Ambient Air Quality Standard.

The Mitchell station averaged approximately ten tons of NOx per summer day during the last twelve years of full operation (1990-2001). Even with growth accounted for within the future year emissions forecasts, the maintenance plan can accommodate up to one hundred and forty-nine (149) tons of NOx per summer day in growth. Therefore, if the station were to reopen at historical emission levels, it would not jeopardize continued maintenance of the 8-hour ozone standard.

- Should the petition be granted, Northwest Indiana will loose the current offset provision, which requires new sources to offset increased emissions. We understand this would not be required as an "attainment area".

It is true that emission offsets for VOCs and NOx would no longer be required for new projects. However, the purpose of the Redesignation petition and maintenance plan is to demonstrate and ensure that compliance with the air quality standard will be maintained in the future. In making this demonstration, we have estimated emissions 10 years into the future and taken into account expected economic growth. Our estimates show that even with growth, declining emissions due to the Clean Air Interstate Rule, new engine and fuel standards and other measures will ensure the ozone standard will be maintained. We will continue to monitor emissions and ozone values closely, and the maintenance plan has triggers that require IDEM to take action even before an actual violation of the standard would occur.

Large projects that may represent emissions increases beyond general growth would be subject to the new source review permitting program for attainment areas known as Prevention of significant deterioration (PSD). New major sources or major modifications of existing sources must install best available control technology and demonstrate that the resulting emissions would not cause or contribute to a violation of any national ambient air quality standard. These permits are subject to public review, comment, and the opportunity for a public hearing to help ensure that these requirements are satisfied.

The emission offset rule is intended to maintain the emissions status quo while an attainment plan is put into place. It is not intended to be a measure to get an area into attainment nor to ensure continued compliance with the ozone standard. The Clean Air Act contemplates that, once an area meets the standard, the designation should be changed appropriately to attainment and emission offsets are no longer required.

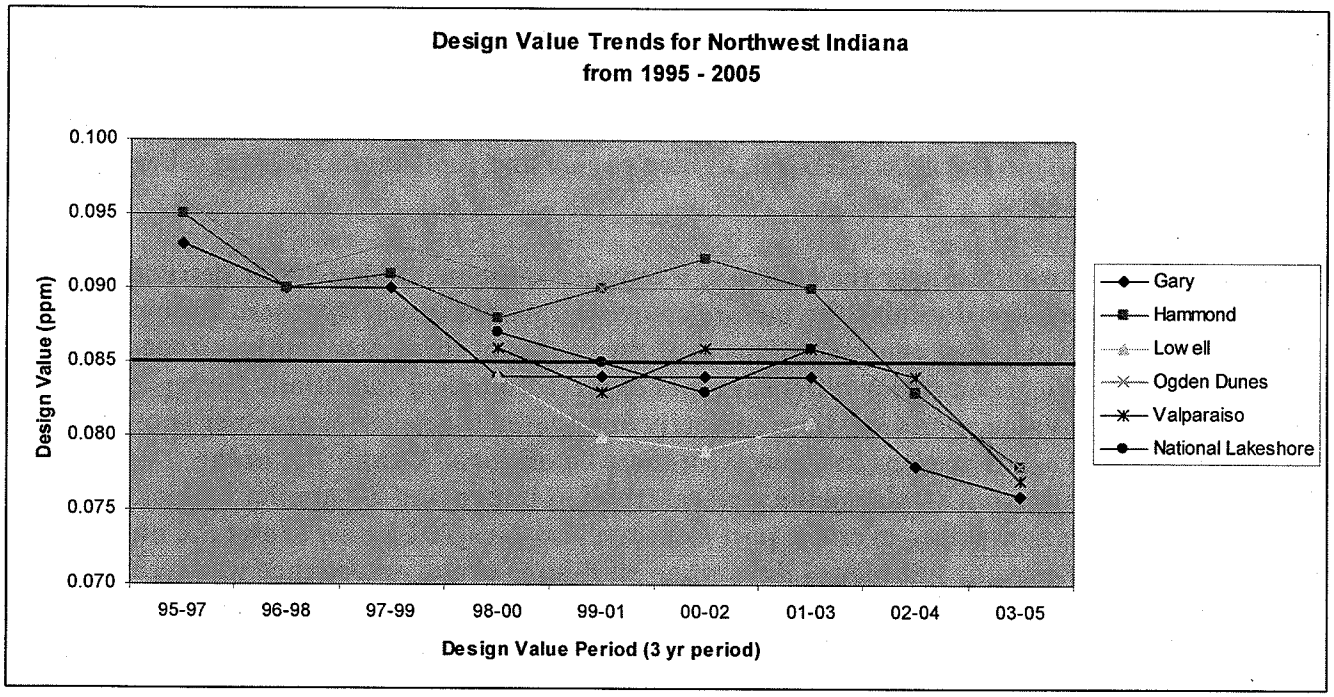
- It is our belief that the threshold for the trigger for the maintenance plan is too high. At 89 ppb, this is over the current standard.

IDEM has proposed the use of either a one-year 4th high of 0.089 ppm or a two-year average 4th high of 0.085 ppm as a trigger to take action. Neither of these values individually represents a violation of the standard, which is measured over three years. Thus, the maintenance plan requires IDEM to take action prior to a violation occurring within the area. This is no less stringent than trigger levels previously used by IDEM or other states. A warning level response consists of a study to determine whether the ozone values indicate a trend toward higher concentrations. A study shall evaluate whether the trend, if any, is likely to continue and, if so, whether control measures are necessary to reverse the trend. A Warning Level Response will be completed as expeditiously as possible, but in no event later than twelve (12) months from the conclusion of the most recent ozone season (September 30). In order to be in violation of the 8-hour ozone standard, a 3-year average (of the annual 4th highest concentration) of 0.085 ppm or greater is required. Since a warning level response trigger is based on only one to two years of monitoring data, it should not be compared to the actual standard of 0.085 ppm that is based on 3 years of data. Nevertheless, since IDEM proposes a two-tier response trigger that includes a two year average of 0.085 ppm, it could be deemed more stringent than necessary for a warning level response.

- Unusual weather occurrences should be considered, regardless of the fact that you are using three-year averages. We have had relatively cool summers the past two years, especially in 2004. Even considering those cool years, the 4th highest readings for Gary was 0.089, for Hammond was 0.087, and for Ogden Dunes was 0.090. To protect public health there needs to be a margin of safety should the climate continue to get warmer, as indicated by recent news reports about global warming.

The commenter refers to 2005's 4th highest readings for Gary of 0.089, for Hammond - 0.087, and for Ogden Dunes - 0.090, and not the 3-year average of the 4th high concentration (design value). 2005 is considered to be an above normal summer as far as maximum temperatures. The U.S. EPA details the methodology for calculating the design value (40 CFR Part 50.10, Appendix I) and attainment demonstrations ("Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS, Section 3.1"). The calculation of the design value considers the monitoring values over the latest three year period and does not rely on one summer's worth of monitoring. The variability of weather conditions is taken into account and the methodology for determining the design value allows for this variation yet not weighing the design value on only one year. Graph 1 below shows the downward trend of design values for Lake and Porter County monitors.

Graph 1



Emission reductions can not be discredited in lower ozone concentrations. Emission reductions of NOx and VOC have taken place over the past few years and as a result, ozone concentrations are lower throughout the Midwest. The redesignation process takes into account the most recent monitored ozone values in order to capture benefits of emissions control strategies. The photochemical modeling supports the declining design values. The photochemical modeling conducted to support the redesignation request uses the 2001-2003 average design values to

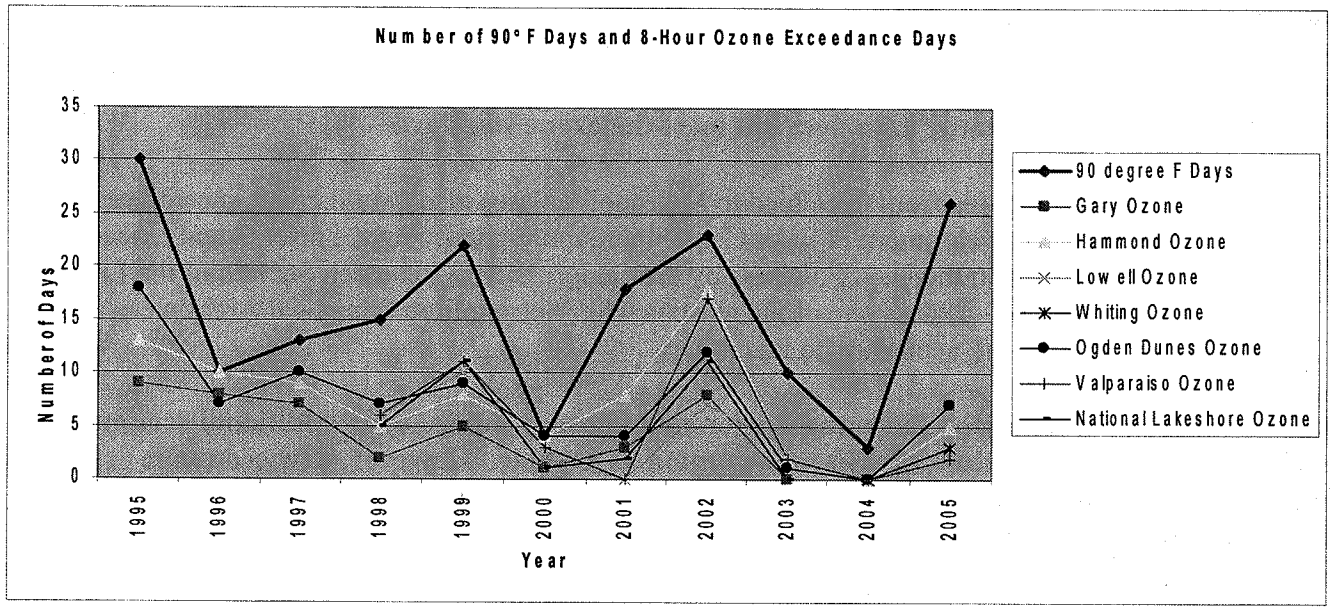
determine future year design values and the meteorological information used in the model was from 2002, a summer with above normal temperatures. Therefore, the ozone conducive weather conditions from 2002 were modeled and the future year design values were calculated from the design values weighted for that high ozone year. The future year modeling shows that future year design values will be lower that the NAAQS in all areas of Lake and Porter counties.

- Also, making unsubstantiated statements in the petition, such as "Ozone formation in the future will be influenced less by meteorological conditions," on page 43 is misleading. Instead, IDEM should have stated that the longer averaging time and the averaging of three years' data reduce the influence of unusual meteorological conditions in any given year. But this still does not take into account unusual weather conditions that may occur over a period of years. How often do you hear about a 1-year drought? Weather just does not work that way.

The reason for the statement "Ozone formation in the future will be influenced less by meteorological conditions," was to indicate that as a result of the emission reductions from the NOx SIP call and other emission control measures, ozone formation is not as widespread and 8-hour exceedances are more localized near urban areas than compared to previous years. Ozone conducive conditions are typically hot temperatures, light winds and clear skies. IDEM has noticed from air quality forecasting efforts that these conditions have been present over the past two summers (2005 and 2006). In previous summers, under these ozone conducive conditions, ozone concentrations would have been elevated. However, ozone levels over the past couple of years have been markedly lower despite hot, stagnant weather conditions. This indicates that ozone levels are currently influenced more by emission control strategies and less by the presence of ozone conducive weather. Although weather plays a key role in ozone formation, the range of weather conditions that result in ozone exceedance days is much narrower due to recent emission reductions, including from the NOx SIP Call, tighter engine and fuel standards, and other emission control measures.

Pertaining to unusual weather over the course of a few years, the methodology for determining an area's design value helps diminish the factors associated with unusual weather. Design values are calculated to average ozone concentrations over the course of three consecutive ozone seasons. This approach accounts for different types of meteorological conditions during an ozone season and the design value would not be completely dominated by cooler or warmer summers, unless there are three ozone seasons in a row with those conditions. Graph 7.1, in the redesignation request document, shows the general trend of improving air quality by looking at the average of the 3 design values over the past eleven years. Graph 2 below shows the number of 90° F days per year and the number of days when an 8-hour ozone exceedance was recorded at a Lake or Porter County ozone monitor. There have been cool summers in the past; including 1996 and 2000 when emissions were greater and ozone concentrations were above 0.085 ppm. Design values are trending downward despite the constant fluctuation of the number of hot days during the summer.

Graph 2



- There are many new sources proposed for Northwest Indiana including large intermodal surface transportation facilities, increased airport development, and a new power plant now under study. The impact from these developments must be considered as part of any redesignation effort.

These potential developments were considered as part of the maintenance plan when we estimated economic growth and the corresponding increase in emissions. Emissions are expected to be lower in 10 years than they are now. There are additional emissions controls "on the books" that have not been implemented yet, and these will offset area growth. In addition, major new sources will be subject to new source review permitting under the Prevention of Significant Deterioration rule requiring best available control technology and a demonstration that the emissions will not cause or contribute to a violation of any NAAQS.

- In addition, this petition ignores new sources that may develop in the Chicago Metropolitan area that may adversely affect our ambient air standard. Lake and Porter Counties do not exist on an island unto themselves. Cook County has received an "F" on Ozone in the American Lung Association's 2006 State of the Air Report. Incidentally, Lake County and Porter Counties also received an "F's" in this report.

The emissions estimates in the maintenance plan take into account the impact of growth and "on the books" future controls in the entire Chicago/Northwest Indiana area. Emissions for the whole area are expected to decrease, even with growth in the future. As long as the greater Chicago portion of Illinois is nonattainment, new major sources are subject to the "emission offset" rule and must find creditable emissions decreases to "offset" any increase in emissions resulting from the lowest achievable emission rate at the new source.

The ALA report focuses on specific days when ozone or fine particles may be elevated, not the actual ozone health standard. The health standard anticipates that there will be occasional days when ozone is high. We try to predict these days through weather forecasting and other factors, and will call an "Air Quality Action Day" to alert sensitive groups that ozone may be elevated and to request that the general public take actions to improve air quality. Occasional episodes of elevated ozone do not mean the area does not meet the ozone standard.

- Breaking these counties from the Chicago Metropolitan area also would create incentives for additional sprawl development in Lake County, and more particularly, Porter County, according to a report provided to the U.S. Congress by the Congressional Research Service of the Library of Congress in 2004. That is one of the reasons why Metropolitan Statistical Areas were created for attainment, according to this report.

An attainment designation for Lake and Porter counties may indeed spur additional economic development, and that would a benefit to the region as a whole. However, new economic development does not mean that "sprawl" will occur. Local land use planning is the mechanism through which a community governs real estate development, and that mechanism is available to the communities in Lake and Porter counties.

- This petition flies in the face of regional and interstate cooperation to improve air quality. It sends a message to the rest of the region that all the work we have done together over the years toward achieving attainment is meaningless. For example, if Lake and Porter Counties were in attainment, we are not sure action would have been taken to implement idle air technology at our truck stops, technology that will remove 20 million pounds of diesel emissions and save 1 million gallons of diesel fuel annually, according to a recent news report in The Times of Northwest Indiana.

IDEM intends to continue cooperating and coordinating air quality planning efforts with other states through the Lake Michigan Air Directors Consortium/Midwest Regional Planning Organization (LADCO). This petition is not intended to be a repudiation of those efforts. IDEM is willing to undertake additional measure to address Indiana's contribution to downwind nonattainment areas, as necessary. The Redesignation of Lake and Porter Counties to attainment will not impact those efforts. For example, Indiana is adopting the Clean Air Interstate Rule to control annual emissions of NOx and SO2 from power plants to address downwind ozone and PM2.5 nonattainment. This is a state-wide rule, and does not depend on Indiana having nonattainment designations to ensure our participation. IDEM is investigating other state-wide NOx, VOC and SO2 controls that could assist with regional nonattainment issues, regardless of our designation status. IDEM has also proposed to add a liquid leak test to the Lake and Porter counties clean air car check rule that will improve the effectiveness of that program.

- Save the Dunes also feel compelled to remind everyone that the Indiana Dunes National Lakeshore lays in these counties. According to the EPA, ground-level ozone interferes with the ability of plants to produce and store food, so that growth, reproduction and overall plant health are compromised. By weakening sensitive vegetation, ozone makes plants more susceptible to disease. These effects can significantly decrease the natural beauty of an area, such as the Indiana Dunes National Lakeshore.

The National Ambient Air Quality Standards under the Clean Air Act must have a primary standard for public health and a secondary standard to protect plants and animals. In the case of the eight hour ozone standard, the primary and secondary standards are set at the same level. Lake and Porter counties have attained both standards and plants are protected as well.

- Since ozone is a serious health concern that especially impacts children and the elderly, and those with breathing problems, it is vital we protect the most sensitive population and be sure the air will be healthy.

IDEM agrees. That is why we forecast Air Quality Action Days, to alert sensitive groups that ozone may be elevated so they can avoid exposure. Over time, ozone levels have decreased greatly, as have the frequency of AQADs. Lake and Porter counties now meet the health standard for ozone, but IDEM will continue to forecast AQADs on those occasions when ozone levels may be elevated.

- Based on these reasons, and others being prepared, Save the Dunes is urging Indiana to withdraw the Petition for Redesignation to EPA.

John Walters, Concerned Resident of Lake County

Mr. Walters expressed a variety of concerns about Walsh and Kelly, an asphalt plant located in close proximity to his residence in Griffith. The concerns focused on sulfur dioxide emissions from the facility and the impact that the facility has on public health.

- **IDEM appreciates Mr. Walters bringing the Walsh and Kelly sulfur dioxide situation to our attention. This issue does not impact the ozone redesignation, but has been referred to IDEM's inspector for that facility.**

Mr. Walters referred to a number of media articles about air quality in Lake County, primarily focusing on the National Air Toxics Assessment and the American Lung Association's annual report card.

The ALA report focuses on specific days when ozone or fine particles may be elevated, not the actual health standard. The health standard is measured over three years and it anticipates that there will be occasional days when ozone is elevated, but that does not mean the area hasn't met the ozone standard.

The National Air Toxics Assessment estimates potential health risks due to the emissions of air toxics, chemicals that are emitted by industries in relatively small amounts but may have very serious health impacts. Air toxics are not the subject of this petition.

- Mr. Walters stated that he objects to the redesignation request and suggests that the state withdraw it from further consideration and focus on protecting public health.

Redesignating the area to attainment does not mean that public health will no longer be protected; it simply recognizes the fact that the area's ozone air quality meets the health based standard. IDEM prepared a maintenance plan to ensure continued compliance with the ozone

standard over time. Under that plan, IDEM will continue to monitor ozone levels and emissions, and will take action to address any increases before a violation of the standard occurs.

Sandy O'Brien, Dunelands Sierra Club

- Ms. O'Brien stated that she did not think redesignation would be a good thing. She indicated that she was confused as to how the American Lung Association could give Lake County an "F", EPA data and newspaper articles indicate air pollution in the area is not A-1, and yet IDEM wants to do this (redesignate the area to attainment).

The grading system used by the American Lung Association (ALA) within its State of the Air 2006 Report is not consistent with how air quality is measured under the 8-hour ozone standard, and thus should not be used to determine an area's compliance with the standard.

The ALA's grading scale differs greatly from the health based ozone standard established by U.S. EPA. Compliance with the health based standard is determined by averaging the annual fourth high 8-hour ozone concentrations for the three most recent ozone seasons (in this case, 2003-2005). For comparison purposes, twenty-six Indiana counties received an "F" for ozone based on the ALA report, twenty-five of those counties currently meet the U.S. EPA eight-hour health standard for ozone.

Jim Bartos, Lake County Resident

- Mr. Bartos indicated that he agreed with those that have spoken against the petition. He urges IDEM to not pursue this (redesignation).

IDEM acknowledges Mr. Bartos' comment.

R. Murzyn, Concerned Resident of Lake County

- Mr. Murzyn expressed a variety of concerns about Walsh and Kelly, an asphalt plant located in close proximity to his residence. The concerns focused on sulfur dioxide emissions from facility and the impact that the facility has on his health. He expressed concern that the lack of more stringent emission limitations on the facility will cause further harm to public health within his neighborhood.

IDEM appreciates Mr. Murzyn bringing the Walsh and Kelly sulfur dioxide situation to our attention. This issue does not impact the ozone redesignation, but has been referred to IDEM's inspector for that facility.

Written Comments

Charlotte J. Read, Citizen
Chesterton, IN

- IDEM's own modeling data included in the culpability analysis section of this petition indicates that Lake and Porter county emissions will continue to contribute to ozone violations elsewhere in the greater nonattainment area. It is clear that we (Lake and Porter counties) are and must remain part of the regional airshed.

Although adjacent to the Chicago-Gary nonattainment area, Southeastern Wisconsin is a separate nonattainment area. Since the Chiwaukee, Wisconsin monitor has previously served as the controlling monitor for the region, IDEM did assess the impact that emissions from Lake and Porter counties may have on values measured at this site. IDEM's analysis indicates that the contributions from Lake and Porter counties to the Chiwaukee, Wisconsin site are insignificant (only 6% of the total projected concentrations and no more than 2% of the total anthropogenic, or man-made emissions derive from a specific Lake and Porter County emission group).

- The LADCO/MRPO May 2006 Air Quality Newsletter reported on their Round 4 modeled design values for 2008, 2009, 2012, and 2018 using several "on the books" control strategies such as CAIR, EGU1 and EGU2. They concluded that while air quality would be improved substantially in both 2009 and 2012, these controls would not be enough to meet the ambient standards everywhere by 2009 and residual nonattainment problems would continue in 2012.

While there may be residual nonattainment in some counties in the Midwest in the future, IDEM's analysis is that Lake and Porter Counties will not be among them. Redesignation is appropriate when three years of data show compliance with the standard and emission projections show maintenance of the standard 10 years into the future. IDEM will continue to work with the LADCO states to address Indiana's contribution to downwind nonattainment, but such cooperation does not depend on keeping Lake and Porter counties in a nonattainment-designated area when air quality data shows they are not.

Thomas CC Smith, Citizen
Porter County, Indiana

- Do not degrade my atmosphere! Do not change the designation for ozone from non-attainment to attainment status.

A designation from nonattainment to attainment simply reflects the status of the air quality now, which is that it meets the health standards. Redesignation will not degrade air quality. The maintenance plan included in the petition, along with additional "on the books" regulations, will ensure continued air quality improvements in the future.

Sandy O'Brien, Group Chair
Dunelands Group of the Hoosier Chapter of the Sierra Club
Hobart, IN

- Because the American Lung Association gave Lake and Porter counties an "F" for ozone in their 2006 State of the Air Report, we think they should not be redesignated to attainment for 8-hour ozone. Throwing out the 3 highest readings per monitor each year seems like an arbitrary way of lowering the tested ozone readings to make them look good when they are not good.

The grading system used by the American Lung Association (ALA) within its State of the Air 2006 Report is not consistent with how air quality is measured under the 8-hour ozone standard, and thus should not be used to determine an area's compliance with the standard.

The ALA's grading scale differs greatly from the health based ozone standard established by U.S. EPA. Compliance with the health based standard is determined by averaging the annual fourth high 8-hour ozone concentrations for the three most recent ozone seasons (in this case, 2003-2005). For comparison purposes, twenty-six Indiana counties received an "F" for ozone based on the ALA report, twenty-five of those counties currently meet the U.S. EPA eight-hour health standard for ozone.

- We are very concerned about new sources of pollution that would be allowed with no offset or mitigation that would come with redesignation to attainment. Big sources of air pollution in the future might include the south suburban (Illiana) expressway, Gary airport expansion, an intermodal (truck transfer) facility, reopening the dirty old Dean Mitchell power plant, and continued sprawl. No net gain of pollution is the best policy for the people that breathe the air here.

It is true that emission offsets for VOCs and NOx would no longer be required for new projects. However, the purpose of the Redesignation petition and maintenance plan is to demonstrate and ensure that compliance the air quality standard will be maintained in the future. In making this demonstration, we have estimated emissions 10 years into the future and taken into account expected economic growth. Our estimates show that even with growth, declining emissions due to the Clean Air Interstate Rule, new engine and fuel standards and other measures will ensure the ozone standard will be maintained. We will continue to monitor emissions and ozone values closely, and the maintenance plan has triggers that require IDEM to take action even before an actual violation of the standard would occur.

The Mitchell issue and how major new stationary sources of emissions will be treated have been addressed earlier in this document.

Susan MiHalo, President
Save the Dunes Council
Michigan City, IN

- There is uncertainty over a major source of NOx and SO2 in Lake County. The Dean Mitchell power plant, located in Gary along the Lake Michigan waterfront was closed in 2002. Now, a recent settlement before the IURC is revisiting the issue to determine whether to re-open the plant. Mitchell is currently in the SIP inventory but has not operated for almost 5 years. Should the plant reopen, these emissions could negatively impact air quality.

- Should the petition be granted, Northwest Indiana will lose the current offset provision which requires new sources to offset increased emissions. We understand that this would not be required as an "attainment area".

- It is our belief that the threshold trigger for the maintenance plan is too high. At 89 ppb, this is over the current standard.

- Pulling out of the current regional effort to achieve attainment status is counterproductive to the regional and interstate cooperation to improve air quality. It sends a message to the rest of the region that all the work that we have done together over the years toward achieving attainment is meaningless.

- Save the Dunes also feel compelled to remind everyone that the Indiana Dunes National Lakeshore lies in these counties. According to the EPA, ground-level ozone interferes with the ability of plants to produce and store food, so that growth, reproduction and overall plant health are compromised. By weakening sensitive vegetation, ozone makes plants more susceptible to disease. These effects can significantly decrease the natural beauty of an area, such as the Indiana Dunes National Lakeshore.

For responses to these comments, please refer to the same comments outlined under the summary of the public hearing.

Janet McCabe, Executive Director
Improving Kids' Environment
Indianapolis, IN

- It is critical that the State of Indiana not break ranks with Illinois and the other states on this regional effort. A separation now will impair Indiana's ability to work cooperatively to encourage other states to make reductions that help us on ozone and on solving our other pressing regional environmental challenges to public health and to economic viability such as fine particle pollution.

IDEM has reassured the other LADCO states that we will continue to work cooperatively to address Indiana's contributions to any downwind residual nonattainment area. The specific designation of these two counties should accurately reflect air quality in those counties and should not impact the state's ability to address contributions to regional air quality.

- Activities in Lake and Porter Counties Contribute Significantly to Areas Downwind:
  The petition incorrectly asserts that emissions from Lake and Porter counties make a minimal contribution to downwind areas. Tables in the Petition show that individual categories of emissions (e.g., motor vehicles, power plants, etc.) contribute at most 3.7% of the ozone at downwind monitors in Michigan and Wisconsin. Given how close many of the monitors are to exceeding the health standard, this level of contribution is indeed significant. Moreover, the important number is not the percentage from an individual source category, but rather the total contribution from Indiana sources when all categories are added together.

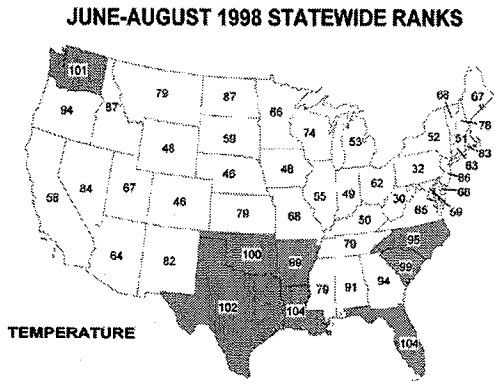
The impact of emission groups was assessed in part to determine whether an individual emission source category was culpable. IDEM's assessment determined that the impact from all individual source categories is insignificant for the monitoring sites assessed. Since most of these sites are projected to attain the standard without additional controls, IDEM focused on the Chiwaukee, Wisconsin site. This site previously served as the controlling monitor for the Greater Chicago Area and is not projected to attain the standard without additional controls. According to IDEM's analysis, only 6% of the total projected concentrations and no more than 2% of the total anthropogenic emissions derive from a specific Lake and Porter County emission group. IDEM deems these levels to be insignificant. This determination is consistent with U.S. EPA's determination that contributions from a single source category in an individual state above 3 ppb are significant. The monitors (Cheltenham, IL and Michigan City, IN) where the non-EGU source category for Lake and Porter counties contributes at least 3ppb concentrations already measure air quality below the 8-hour ozone standard.

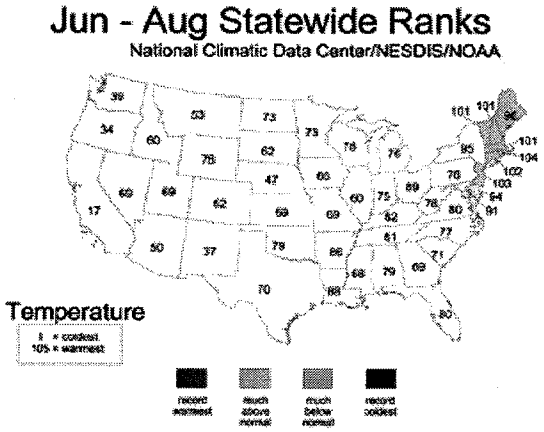
- The Air Quality Data Do Not Support Redesignation at This Time:
  In order to seek redesignation, Indiana must show that the area meets the ozone health standard. This standard is met if the average of the 4th high ozone values from the most recent three year period from each monitor is less than 85 parts per billion (ppb). Indiana's monitoring data only meet that test because of the extraordinarily cool weather in 2004. Of the five ozone monitors in Lake and Porter counties, four of them had a 4th high value greater than 85 ppb in 2005 (ranging from 87 ppb to 90 ppb). Had the weather not been so unusually cool in 2004, it is highly unlikely that all of the monitors would have met the standard.

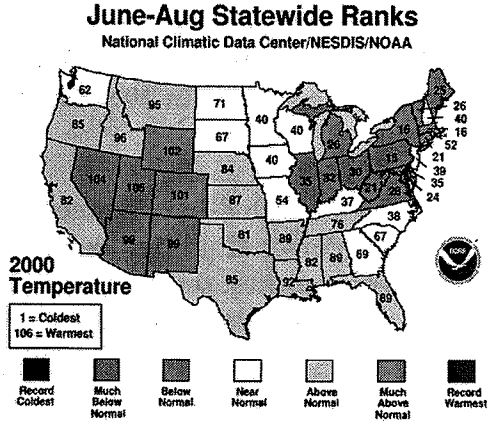
The design values for the last two three-year periods for all monitors in Lake and Porter Counties attain the 8-hour ozone standard and therefore, the counties are eligible for redesignation to attainment. Photochemical modeling supports the continued decrease in ozone concentrations in Lake and Porter Counties in the future. This modeling takes a conservative approach as the meteorological information used in the model was from 2002, which is an above normal summer in terms of temperatures and had many ozone exceedance days.

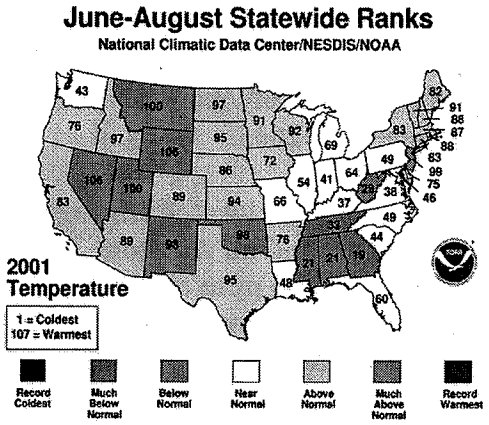
Due to the similar meteorological conditions of 2002 and 2005, a comparison between the two years might offer some insight on the benefit of emissions reductions made between 2002 and 2005. The National Climatic Data Center (NCDC), National Environmental Satellite, Data and Information Service (NESCIS), National Oceanic and Atmospheric Administration (NOAA) provide a ranking of the summer months: June, July and August compared over the past 104 to 111 years. Below is Indiana's temperature ranking between 1998 and 2005, with the scale of 1 representing the coldest summer and 111 being the warmest during the previous 111 year period.

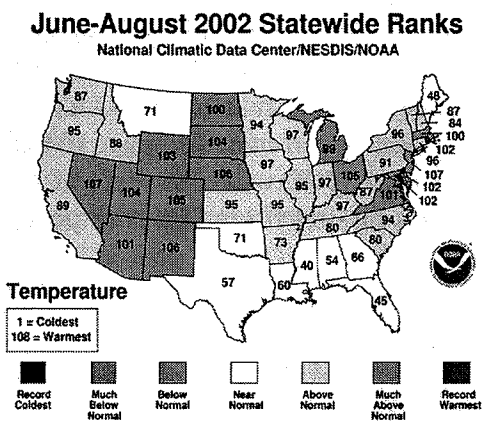
1998 – Near normal temperatures with a ranking of 49 out of 104 years
1999 – Above normal temperatures with a ranking of 75 out of 105 years
2000 – Below normal temperatures with a ranking of 32 out of 106 years
2001 – Near normal temperatures with a ranking of 41 out of 107 years
2002 – Above normal temperatures with a ranking of 97 out of 108 years
2003 – Much below normal temperatures with a ranking of 9 out of 109 years
2004 – Much below normal temperatures with a ranking of 6 out of 110 years
2005 – Above normal temperatures with a ranking of 93 out of 111 years

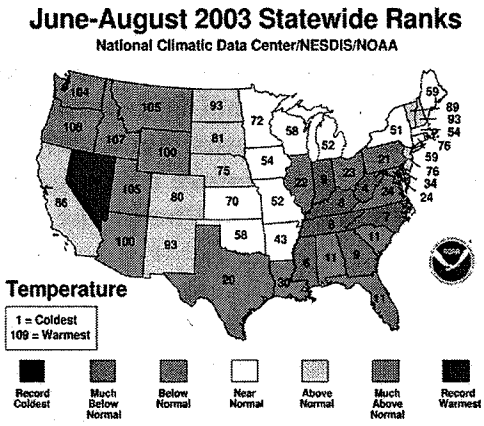


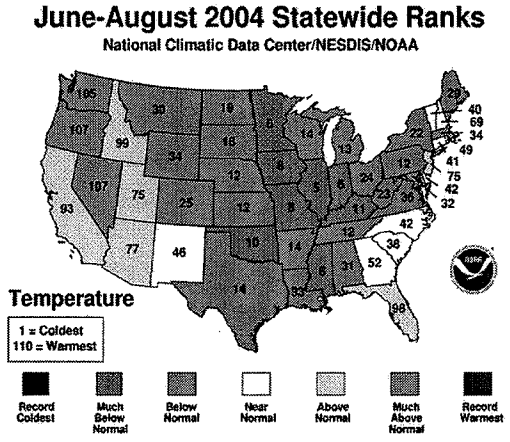


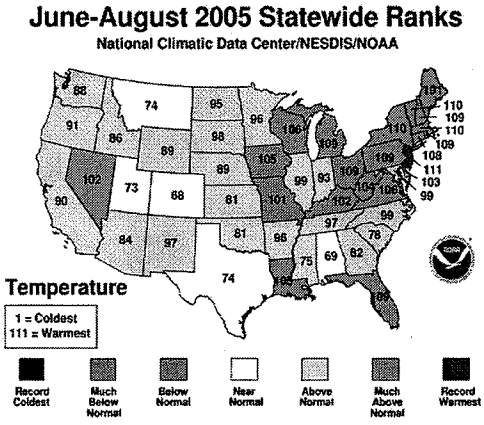












2003 and 2004 can be characterized as cool summers. Despite 2003 being ranked as a cooler than normal summer period, there were 13 ozone monitors throughout the state with 4th high ozone values at 0.085 ppm or higher. Lake and Porter County ozone monitors recorded 4th high readings between 0.077 and 0.082 ppm. 2002 and 2005 summers are considered warmer than normal. 2002 and 2005 had similar above normal rankings based on temperature and the number of 90^{o} F days recorded in Chicago was 23 days in 2002 and 26 days in 2005. Average maximum temperatures for June/July/August were 1.7 ^{o}F greater than the normal in 2002 and 2.1 ^{o}F greater than the normal in 2005.

In 2002, 40 of the 41 ozone monitors located throughout the state had a 4th high 8-hour ozone reading of 0.085 ppm or higher, and all six ozone monitors in Lake and Porter Counties had 4th high 8-hour ozone readings of 0.085 ppm or above. In Lake and Porter counties, the highest 4th high 8-hour ozone value was 0.101 ppm and the average 4th high 8-hour ozone value of the six Lake and Porter County ozone monitors was 0.097 ppm.

In 2005, 10 of the 41 ozone monitors located throughout the state had a 4th high 8-hour ozone reading of 0.085 ppm or higher, and all four of the five ozone monitors in Lake and Porter Counties had a 4th high 8-hour ozone reading of 0.085 ppm or higher. In Lake and Porter counties, the highest 4th high 8-hour ozone value was 0.090 ppm and the average 4th high 8-hour ozone reading of 0.086 ppm. The 4th high 8-hour ozone value at each of the Lake and Porter

County monitors was 0.01 ppm less in 2005 than 2002, even though there were more 90° F days and a higher average temperature in 2005.

The number of 8-hour ozone exceedance days (days when as least one of the Lake or Porter County monitors exceeded 0.085 ppm dropped from 12 exceedance days in 2002 to 5 exceedance days in 2005. This demonstrates that the emissions reductions as a result of the NOx SIP call and various other national, regional, state and local reductions from 2002 to 2005 aided in reducing ozone levels in the state.

Another analyses shows that if the 4th high 8-hour ozone values were averaged over the past 4 years (2002 – 2005) instead of the 3 year design value period, the 4th high 8-hour ozone averages at all Lake and Porter County monitors would fall below 0.085 ppm. This analysis allows for 2 years with above normal temperatures and 2 years of much below normal temperatures.

In summary, while the summers of 2003 and 2004 had below normal temperatures, 2005 had above normal temperatures. Due to emission reductions between the 2002 and 2005 ozone seasons, 2005 resulted in 8-hour ozone concentrations and exceedance days that were much less than the 2002 summer.

Brian Urbaszewski, Director of Environmental Health Programs
American Lung Association of Metropolitan Chicago
Faith Bugel, Staff Attorney
Environmental Law and Policy Center of the Midwest
Chicago, IL

- Great numbers of people suffer from lung disease in those counties (Lake and Porter, Indiana) as well as neighboring counties. Based on the most recent estimates of prevalence from the American Lung Association, over 44,000 people have asthma in Lake and Porter counties. Over 440,000 people in Cook County, Illinois which abuts Lake County, Indiana also have asthma.

IDEM agrees that asthma is a serious health issue, and will continue to forecast and call Air Quality Action Days when they are warranted. Nonetheless, an attainment designation is appropriate when air quality meets the ozone standard, as it does in Lake and Porter Counties.

- Furthermore, we do not believe the applicable requirements for redesignation have been attained. One provision notes that "A demonstration that improvement in air quality between the year violations occurred and attainment was achieved is based on permanent and enforceable emission reductions and not on temporary adverse economic conditions or unusually favorable meteorology." We do not believe this has been proved. Cool weather for ozone seasons in the three-year reporting period used by the State of Indiana has been below long-term averages.

Indiana's modeling for an attainment demonstration follows the U.S. EPA guidance, using the weighted average design values. Average design values are calculated, using three design values (2000-2002, 2001-2003, and 2002-2004), thus weighing the 2002 design value more than any other design values of the five years. Permanent and enforceable emission reductions of NOx and VOC

have taken place over the past few years. Photochemical modeling supports the continued decrease in ozone concentrations in Lake and Porter Counties in the future, taking emissions reductions into account. This modeling takes a conservative approach as the meteorological information used in the model was from 2002, which is considered an above normal summer in terms of temperatures with many monitored ozone exceedances.

Temperatures were above normal for 2002 and 2005 and near normal for 2000 and 2001 and much below normal for 2003 and 2004. Although weather plays a key role in ozone formation, the range of weather conditions that result in ozone exceedance days is much narrower subsequent to the recent emission reductions, such as from the NOx SIP and tighter engine standards. A comparison of the 8-hour ozone values from 2002 (before the NOx SIP call was in effect) and 2005 (after emission controls for NOx were installed) shows a great improvement in air quality.

- ...we would like to echo points made by Save the Dunes at a recent public hearing on the status of the Dean Mitchell coal fired power plant located in Lake County. The plant was temporarily closed in 2002 and based on what we know it could be restarted at any time, including after any ozone attainment designation was awarded.

- Not running the plant has artificially dampened air pollution levels in northwest Indiana but there is no guarantee that those emissions will not be there in the future. In addition, allowing for the plant to restart after an attainment demonstration and then not requiring a maintenance plan to be implemented until a reading of 89 ppb is recorded would put all area residents in an environment where they would deliberately be exposed to air that fails to meet minimum federal health standards.

- Based on the most recent emission inventories and accepted modeling techniques, sites in Lake, Porter and adjacent counties are still showing ozone nonattainment in 2012.

Although a modeling demonstration is not a prerequisite to redesignation, IDEM analyzed the modeling and concluded that Lake and Porter would continue to attain the standard into the future. The comments concerning the Mitchell station, modeling assessments, and contributions affecting other nonattainment areas have been addressed earlier in this document.

Scott Hassett, Secretary
Wisconsin Department of Natural Resources
Madison, WI

- WDNR (Wisconsin Department of Natural Resources) believes that the proposed redesignation is inconsistent with the Clean Air Act and EPA's nonattainment regulations.

- Lake and Porter counties are part of the Chicago-Gary-Lake, Co., IN nonattainment area and they directly contribute air pollutants in significant quantities to the greater Chicago and greater Milwaukee nonattainment areas and other nearby nonattainment areas around the Lake Michigan shoreline. Emission control efforts involving sources in Lake and Porter counties will be integral to developing any comprehensive attainment demonstration for all parts of the Lake Michigan nonattainment area and for other directly adjacent nonattainment areas

downwind. The Chiwaukee Prairie monitor in southeast Wisconsin has been formally identified by EPA within designation decisions letters as the "design" monitor for both the IL-IN and WI ozone nonattainment areas since the early 1990s.

IDEM intends to continue working cooperatively with the other LADCO states to address regional air quality issues, and that cooperation is not dependent on the specific designation of Lake and Porter counties. For example, Indiana is adopting CAIR state-wide to address power plant NOx emissions and their contribution to regional nonattainment. IDEM is analyzing other stationary sources of NOx state-wide to determine if additional controls are warranted to address downwind nonattainment. IDEM has also proposed to add a liquid leak test to the Lake and Porter counties' inspection and maintenance program rule that will improve the effectiveness of that program. These efforts will continue despite redesignation of these two counties.

- Indiana's redesignation proposal does not recognize that Indiana emissions are a significant contributor to the continued real and modeled violations of the ozone standard in the Lake Michigan region. The projected 5 ppb contribution in 2009 and 2012 in southeast Wisconsin exceeds EPA's assessment of what constitutes a "significant interstate contribution" and much of that contribution is based on emissions that originate from NW Indiana counties. IDEM does not propose a strategy for reduction of NOx and VOC emissions that is of a magnitude and in a timeframe adequate to demonstrate attainment at all the critical monitors significantly impacted by the emissions from Lake and Porter counties.

IDEM is working on a strategy with the other LADCO states to address residual nonattainment. Such strategy may include additional NOx and VOC controls in Lake and Porter counties as well as elsewhere.

- It is Wisconsin's understanding, based on extensive regional air quality modeling over the last two years that the Chiwaukee monitor is not projected to reach a modeled level of attainment by 2009 based on existing programs.

- EPA approval of the requested action would set an unacceptable precedent for emission control program decisions in other states.

IDEM has demonstrated in its petition that it meets the requirements for redesignation contained in the Clean Air Act, and therefore, it should be redesignated. However, redesignation is not a bar to further interstate efforts to improve air quality.

<u>Gordon Wilder, Citizen</u>
Highland, Indiana

- My own view is tempered by what the July/August edition of Sierra Magazine states concerning air pollution in the greater Chicago area.

- 30,000 people die each year from power-plant pollution alone, according to a study by a firm that trains EPA staffers-almost twice as many as are killed by drunk drivers and 50% more than are murdered.

- A Harvard University study found that 100,000 heart-disease related deaths each year are believed to be caused by contaminants in the air.

- This is only a tiny fraction of course of what is in the article. Even IF, a big IF, only a portion of what is contained in the article is true there seems to me to be every reason why our government should be doing much more to enforce the present laws and of course-the purpose of this letter-to certainly NOT DO ANYTHING which might enhance the already distressingly poor quality of air which we breathe.

Redesignating the area to attainment does not mean that public health will no longer be protected; it simply recognizes the fact that the area's air quality meets the ozone health standard. IDEM prepared a maintenance plan to ensure continued compliance with the ozone standard over time. Under that plan, IDEM will continue to monitor ozone levels and emissions, and will take action to address any increases before a violation of the standard occurs. Additionally, all emission controls that led to improved air quality will remain in place and shall be enforced.

Laurel L. Kroack, Chief
Bureau of Air
Illinois Environmental Protection Agency
Springfield, IL

- Although air quality has greatly improved as a result of our (Indiana, Illinois, Wisconsin, Michigan, and Ohio) joint efforts, violations of the 8-hour ozone NAAQS are still occurring in our region. We believe that emissions from Lake and Porter counties contribute significantly to ongoing violations of the ozone standard and that further emissions reductions will be required beyond those currently contained in Indiana's State Implementation Plan.

- As Indiana's petition notes, 8-hour ozone concentrations exceeding the level of the NAAQS have been measured in southeast Wisconsin during the most recent 3-year period, 2003-2005. Modeling performed by LADCO indicates that the 8-hour ozone standard will not be achieved in southeastern Wisconsin in the near future without additional control measures beyond those currently required by the Clean Air Act. The LADCO states have not reached consensus on the measures to be implemented, whether local or regional in nature. The modeling also indicates that Lake and Porter counties contribute 6-8 parts per billion (ppb) of ozone in southeastern Wisconsin, 7-10% of the total ozone concentration. Emissions from Lake and Porter counties constitute 15% of the nonattainment area's VOC emissions (including emissions from Indiana and Illinois counties included in the NAA), and 20% of the total NOx emissions for the nonattainment area. There is no technical basis for Indiana's claims that these contributions are insignificant.

Emissions sources in Lake and Porter Counties are already subject to strict control requirements. In addition to the original reasonably available control technology rules adopted under the 1977 Clean Air Act amendments, Indiana has rules in place that control VOC emissions from sinter plants at steel mills, and more generic rules for other significant sources of VOC. Unlike the Illinois program, Indiana's vehicle inspection and maintenance program tests

both OBD2 and older vehicles, and Indiana has proposed to add a liquid leak test to improve what is one of the most effective programs in the entire Midwest. Indiana is also pursuing best available retrofit technology (BART) at several facilities in Lake and Porter counties that should result in emission reductions that are similar, if not greater than, reductions from applying reasonably available control technology. Indiana remains committed to pursuing true regional efforts on a state-wide basis that would result in cost-effective emission reductions.

- For its NOx SIP Call rulemaking, U.S. EPA considered a 2 ppb contribution from an entire state a significant contribution for 1-hour ozone. For the Clean Air Interstate Rule, U.S. EPA used a state contribution of 3 ppb as the criterion for establishing significance of downwind impacts. In both rulemakings, U.S. EPA concluded that emissions from sources in Indiana contributed at levels greater than these thresholds to down wind nonattainment areas, including the nonattainment area in southeast Wisconsin. LADCO's modeling, as cited in Indiana's petition, demonstrate that Lake and Porter counties by themselves contribute amounts that are greater than U.S. EPA's thresholds for entire states.

Indiana is adopting the CAIR, which is intended to address power plant contributions to downwind nonattainment. No Indiana source category has a culpability of 3 ppb or greater at a monitor site measuring above the 8-hour ozone standard. IDEM is also analyzing other stationary source control measures that could address additional downwind contributions. Such measures are not limited to Lake and Porter sources, and do not require a nonattainment designation in Lake and Porter counties in order for the state to adopt them. Indiana commits to maintain all emission control measures that have been implemented in Lake and Porter counties, including the vehicle inspection and maintenance program. In fact, beginning in 2007, Indiana will enhance its vehicle inspection and maintenance program by incorporating a liquid leak component that will significantly increase the effectiveness of evaporative VOC emission reductions associated with the program. The vehicle inspection and maintenance program for Lake and Porter counties will continue to apply to all light-duty gasoline vehicles with a model year of 1976 or newer, as opposed to the Illinois program that will soon test OBD II-equipped vehicles with a model year of 1996 or newer only. Therefore, the mobile source emission control program for Lake and Porter counties will be more stringent than that in NE Illinois and SE Wisconsin.

- Lake and Porter counties are tied to the Illinois nonattainment counties geographically and economically and reside in the same lakeshore environment. U.S. EPA guidance clearly states that these factors must be considered when the states recommend the boundaries of a nonattainment area.

Indiana's petition is to redesignate a portion of the interstate nonattainment area, not to revise the boundaries. See Section 107(d)(3) of the Clean Air Act.

Kenneth L. Mentzel, Manager, Environmental Control
U.S. Steel – Gary Works
Gary, IN

- Lake and Porter counties have demonstrated attainment with the 8-hour ozone NAAQS through a combination of measures enacted to reduce local ozone precursor emissions and more recently, through additional reductions from regional emission reduction programs. The overall downward trends in precursor emissions and actual ozone concentrations are expected to continue, driven by additional emission reduction measures anticipated to occur as the Clean Air Interstate Rule (CAIR) and other federal measures are implemented in the near future.

- One of the requirements of the Ozone Redesignation and Maintenance Plan is a commitment to expeditiously implement contingency measures upon the occurrence of monitored ozone levels at or above specified thresholds. We believe that the process outlined in the proposed redesignation package to trigger "Warning Level Response" and the "Action Level Response" action is an appropriate measure but recommend one modification. That modification should be to require that the data used to trigger a response action are values that have undergone and passed the appropriate quality assurance and quality control procedures. Use of QA/OC'd data will assure that response actions are undertaken based on legitimate air quality readings of concern.

IDEM acknowledges the comments provided and will rely solely on quality assured air quality data prior to evaluating and implementing a warning or action level response.

Kay Nelson, Director, Environmental Affairs
Northwest Indiana Forum

- The Indiana Department of Environmental Management has accumulated statistical records of compliance for Lake and Porter counties with regards to the 8-hour ozone standard to warrant a Redesignation to attainment for those counties. Utilizing the required demonstration procedure, IDEM has documented that the request is not based upon a temporary reduction or unusual meteorological occurrences. A maintenance plan has been developed which includes action steps. Existing requirements will not be repealed and facilities will still be subject to PSD requirements

- The Redesignation request reflects the emissions control efforts and compliance records of existing Lake and Porter counties industries in addition to other air quality initiative efforts.

- It is important to note that safeguards have been developed and are in place for protective purposes. Industries and environmental stakeholders have been working cooperatively through the efforts of the Forum's Environmental committee and the NIRPS Air Quality Steering Committee to focus upon these issues.

- An outcome of the Redesignation will include the removal of offset requirements for new and/or expanding industries in the affected counties thereby creating a positive economic development atmosphere in northwest Indiana.

IDEM acknowledges the comments provided and appreciates the contributions of local advisory committees.

APPENDIX E

Example MOBILE Input/Output Files and Core Data,
Lake and Porter Counties, Indiana

1 Generic Files (used for all analysis years)

1.1 Vehicle Age Distribution

iregdata.d

```
REG DIST
* County Group 1
* Lake and Porter Counties
* LDV
 1 0.0489 0.0651 0.0662 0.0683 0.0753 0.0684 0.0628 0.0632 0.0598 0.0646
   0.0584 0.0508 0.0482 0.0391 0.0369 0.0298 0.0251 0.0148 0.0137 0.0089
   0.0080 0.0036 0.0024 0.0017 0.0160
* LDT1
 2 0.0501 0.0668 0.0679 0.0396 0.0324 0.0282 0.0337 0.0312 0.0583 0.0602
   0.0823 0.0600 0.0462 0.0594 0.0574 0.0559 0.0444 0.0367 0.0295 0.0192
   0.0123 0.0061 0.0062 0.0051 0.0109
* LDT2
 3 0.0694 0.0925 0.0940 0.0869 0.0954 0.0841 0.0889 0.0759 0.0502 0.0512
   0.0460 0.0414 0.0317 0.0234 0.0166 0.0131 0.0155 0.0044 0.0039 0.0032
   0.0036 0.0020 0.0013 0.0009 0.0045
* LDT3
 4 0.0579 0.0770 0.0782 0.0693 0.0766 0.0850 0.0547 0.0582 0.0532 0.0664
   0.0582 0.0410 0.0340 0.0255 0.0274 0.0275 0.0238 0.0161 0.0132 0.0111
   0.0081 0.0047 0.0036 0.0020 0.0273
* LDT4
 5 0.0611 0.0815 0.0827 0.0961 0.1056 0.1126 0.0951 0.0795 0.0623 0.0510
   0.0480 0.0152 0.0173 0.0090 0.0111 0.0053 0.0075 0.0055 0.0075 0.0072
   0.0046 0.0026 0.0016 0.0008 0.0293
```

1.2 Inspection/Maintenance Input Files

IM2002a.d

```
I/M CUTPOINTS      :
*
* Calendar Year: 2002
*
* The four blocks of 75 values respectively apply to the MOBILE6 Types:
* LDGV, LDGT2, LDGT4 and HDGV2B.
*
* Within each of the four blocks, the first 25 values are HC cutpoints,
* the second 25 values CO cutpoints, and the third 25 values NOx cutpoints.
*
* Model Years:
* 2002 2001 2000 1999 1998 1997 1996 1995 1994 1993 1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1982 1981 1980 1979 1978
*
* LDGV
  0.6  0.6  0.6  0.6  0.6  0.6  0.6  0.8  0.8  0.8  0.8  0.8  1.4  1.4  1.4  1.4  2.0  2.0  2.0  2.0  2.0  2.0  2.0  2.0  2.0
 10.0 10.0 10.0 10.0 10.0 10.0 10.0 15.0 15.0 15.0 15.0 15.0 20.0 20.0 20.0 20.0 30.0 30.0 30.0 30.0 60.0 60.0 60.0 60.0 60.0
  2.5  2.5  2.5  2.5  2.5  2.5  2.5  2.5  2.5  2.5  2.5  2.5  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0
*
* LDGT2
  0.8  0.8  0.8  0.8  0.8  0.8  0.8  1.6  1.6  1.6  1.6  1.6  2.2  2.2  2.2  2.2  3.2  3.2  3.2  5.0  5.0  5.0  5.0  5.0  5.0
 20.0 20.0 20.0 20.0 20.0 20.0 20.0 40.0 40.0 40.0 40.0 40.0 55.0 55.0 55.0 55.0 70.0 70.0 70.0 80.0 80.0 80.0 80.0 80.0 80.0
  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.5  3.5  3.5  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0
*
* LDGT4
  0.8  0.8  0.8  0.8  0.8  0.8  1.6  1.6  1.6  1.6  1.6  1.6  2.0  2.0  2.0  2.0  3.2  3.2  3.2  5.0  5.0  5.0  5.0  5.0  5.0
 20.0 20.0 20.0 20.0 20.0 20.0 40.0 40.0 40.0 40.0 40.0 40.0 55.0 55.0 55.0 55.0 70.0 70.0 70.0 80.0 80.0 80.0 80.0 80.0 80.0
  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  5.0  5.0  5.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0
*
* HDGV2B
  2.0  2.0  2.0  2.0  2.0  2.4  2.4  2.4  2.4  2.4  2.4  2.4  3.0  3.0  3.0  3.0  5.0  5.0  6.0  6.0  7.5  7.5  7.5  7.5  7.5
 30.0 30.0 30.0 30.0 30.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 60.0 60.0 60.0 60.0 75.0 75.0 100. 100. 100. 100. 100. 100. 100.
  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0
```

IM2002b.d

```
I/M CUTPOINTS      :
*
* Calendar Year: 2002
*
* The four blocks of 75 values respectively apply to the MOBILE6 Types:
* LDGT1, LDGT3, LDGT4 and HDGV2B.
*
* Within each of the four blocks, the first 25 values are HC cutpoints,
* the second 25 values CO cutpoints, and the third 25 values NOx cutpoints.
*
* Model Years:
* 2002 2001 2000 1999 1998 1997 1996 1995 1994 1993 1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1982 1981 1980 1979 1978
*
* LDGT1
  0.8  0.8  0.8  0.8  0.8  0.8  0.8  1.6  1.6  1.6  1.6  1.6  2.2  2.2  2.2  2.2  3.2  3.2  3.2  5.0  5.0  5.0  5.0  5.0  5.0
 20.0 20.0 20.0 20.0 20.0 20.0 20.0 40.0 40.0 40.0 40.0 40.0 55.0 55.0 55.0 55.0 70.0 70.0 70.0 80.0 80.0 80.0 80.0 80.0 80.0
  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.0  3.5  3.5  3.5  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0
*
* LDGT3
  0.8  0.8  0.8  0.8  0.8  0.8  1.6  1.6  1.6  1.6  1.6  1.6  2.0  2.0  2.0  2.0  3.2  3.2  3.2  5.0  5.0  5.0  5.0  5.0  5.0
 20.0 20.0 20.0 20.0 20.0 20.0 40.0 40.0 40.0 40.0 40.0 40.0 55.0 55.0 55.0 55.0 70.0 70.0 70.0 80.0 80.0 80.0 80.0 80.0 80.0
  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  5.0  5.0  5.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0
*
* LDGT4
  0.8  0.8  0.8  0.8  0.8  0.8  1.6  1.6  1.6  1.6  1.6  1.6  2.0  2.0  2.0  2.0  3.2  3.2  3.2  5.0  5.0  5.0  5.0  5.0  5.0
 20.0 20.0 20.0 20.0 20.0 20.0 40.0 40.0 40.0 40.0 40.0 40.0 55.0 55.0 55.0 55.0 70.0 70.0 70.0 80.0 80.0 80.0 80.0 80.0 80.0
  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  4.5  5.0  5.0  5.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0  7.0
*
* HDGV2B
  2.0  2.0  2.0  2.0  2.0  2.4  2.4  2.4  2.4  2.4  2.4  2.4  3.0  3.0  3.0  3.0  5.0  5.0  6.0  6.0  7.5  7.5  7.5  7.5  7.5
 30.0 30.0 30.0 30.0 30.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 60.0 60.0 60.0 60.0 75.0 75.0 100. 100. 100. 100. 100. 100. 100.
  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  6.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0  8.0
```

2 2004 MOBILE6 Input Files

2.1 2004 MOBILE6 Command File

2004m6.in

```
MOBILE6 INPUT FILE

POLLUTANTS          : HC NOX

RUN DATA

MIN/MAX TEMPERATURE: 62.5 83.4
ABSOLUTE HUMIDITY   : 85.7
CLOUD COVER         : 0.34
FUEL RVP            : 9.0
FUEL PROGRAM        : 2 N
NO REFUELING        :
EXPAND EXHAUST      :
EXPAND EVAPORATIVE  :
ANTI-TAMP PROG      :
90 76 95 22222 21111111 1 12 095. 12111112
REG DIST            : iregdata.d

* The following describes the I/M programs within Lake/Porter Counties:
* First I/M Program
I/M PROGRAM         : 1 1997 2050 2 T/O IDLE
I/M MODEL YEARS     : 1 1976 1980
I/M VEHICLES        : 1 22222 21111111 1
I/M STRINGENCY      : 1 20.0
I/M COMPLIANCE      : 1 95.0
I/M WAIVER RATES    : 1 3.0 3.0
* Second I/M Program (Cutpoints for LDGV, LDGT2, LDGT4 and HDGV2B)
I/M PROGRAM         : 2 1997 2050 2 T/O IM240
I/M MODEL YEARS     : 2 1981 1995
I/M VEHICLES        : 2 21212 21111111 1
I/M STRINGENCY      : 2 20.0
I/M COMPLIANCE      : 2 95.0
I/M WAIVER RATES    : 2 3.0 3.0
I/M CUTPOINTS       : 2 IM2002A.d
I/M GRACE PERIOD    : 2 4
* Third I/M Program (Cutpoints for LDGT1 and LDGT3)
I/M PROGRAM         : 3 1997 2050 2 T/O IM240
I/M MODEL YEARS     : 3 1981 1995
I/M VEHICLES        : 3 12121 11111111 1
I/M STRINGENCY      : 3 20.0
I/M COMPLIANCE      : 3 95.0
I/M WAIVER RATES    : 3 3.0 3.0
I/M CUTPOINTS       : 3 IM2002B.d
I/M GRACE PERIOD    : 3 4
* Fourth I/M Program
I/M PROGRAM         : 4 1997 2050 2 T/O GC
I/M MODEL YEARS     : 4 1976 1995
```

```
I/M VEHICLES        : 4 22222 21111111 1
* Fifth I/M Program
I/M PROGRAM         : 5 2002 2050 2 T/O OBD I/M
I/M MODEL YEARS     : 5 1996 2050
I/M VEHICLES        : 5 22222 21111111 1
I/M STRINGENCY      : 5 20.0
I/M COMPLIANCE      : 5 95.0
I/M WAIVER RATES    : 5 3.0 3.0
I/M GRACE PERIOD    : 5 4
* Sixth I/M Program
I/M PROGRAM         : 6 1997 2050 2 T/O EVAP OBD & GC
I/M MODEL YEARS     : 6 1996 2050
I/M VEHICLES        : 6 22222 11111111 1

SCENARIO RECORD

CALENDAR YEAR       : 2004
EVALUATION MONTH    : 7
VMT FRACTIONS       :
0.3903  0.0673  0.2239  0.0690  0.0559  0.0608  0.0060  0.0047
0.0036  0.0134  0.0159  0.0175  0.0621  0.0030  0.0014  0.0052
VMT BY FACILITY     : 2004nvmt.d
SPEED VMT           : svmt04.d


END OF RUN
```

2.2 2004 Speed VMT Input File

svmt04.d

SPEED	VMT													
1	1	0.0000	0.0000	0.0000	0.0000	0.0136	0.1458	0.0847	0.0140	0.0609	0.0580	0.1092	0.2295	0.2121	0.0723
1	2	0.0000	0.0000	0.0000	0.0000	0.0136	0.1458	0.0847	0.0140	0.0609	0.0580	0.1092	0.2295	0.2121	0.0723
1	3	0.0000	0.0000	0.0000	0.0000	0.0136	0.1458	0.0847	0.0140	0.0609	0.0580	0.1092	0.2295	0.2121	0.0723
1	4	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	5	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	6	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	7	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	8	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	9	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	10	0.0000	0.0000	0.0000	0.0000	0.0859	0.0451	0.0743	0.0477	0.0518	0.0830	0.1519	0.2129	0.1784	0.0689
1	11	0.0000	0.0000	0.0000	0.0000	0.0859	0.0451	0.0743	0.0477	0.0518	0.0830	0.1519	0.2129	0.1784	0.0689
1	12	0.0000	0.0000	0.0000	0.0000	0.0859	0.0451	0.0743	0.0477	0.0518	0.0830	0.1519	0.2129	0.1784	0.0689
1	13	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	14	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	15	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	16	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	17	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	18	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	19	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	20	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	21	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	22	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	23	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
1	24	0.0000	0.0000	0.0000	0.0000	0.0042	0.0000	0.0000	0.0480	0.1429	0.0441	0.0517	0.1828	0.4178	0.1085
2	1	0.0000	0.0012	0.0033	0.0155	0.0234	0.1305	0.0576	0.1911	0.2613	0.0917	0.1136	0.0214	0.0894	0.0000
2	2	0.0000	0.0012	0.0033	0.0155	0.0234	0.1305	0.0576	0.1911	0.2613	0.0917	0.1136	0.0214	0.0894	0.0000
2	3	0.0000	0.0012	0.0033	0.0155	0.0234	0.1305	0.0576	0.1911	0.2613	0.0917	0.1136	0.0214	0.0894	0.0000
2	4	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	5	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	6	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	7	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000

2	8	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	9	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	10	0.0000	0.0012	0.0084	0.0185	0.0322	0.1323	0.0820	0.2026	0.2275	0.0833	0.1059	0.0241	0.0820	0.0000
2	11	0.0000	0.0012	0.0084	0.0185	0.0322	0.1323	0.0820	0.2026	0.2275	0.0833	0.1059	0.0241	0.0820	0.0000
2	12	0.0000	0.0012	0.0084	0.0185	0.0322	0.1323	0.0820	0.2026	0.2275	0.0833	0.1059	0.0241	0.0820	0.0000
2	13	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	14	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	15	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	16	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	17	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	18	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	19	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	20	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	21	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	22	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	23	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000
2	24	0.0000	0.0000	0.0002	0.0057	0.0064	0.1275	0.0242	0.1335	0.3357	0.0832	0.1522	0.0237	0.1077	0.0000

2.3 2004 VMT by Facility Input File

Each of the analysis years has one of these files. They are slightly different from each other but virtually identical. We refrain from printing all of them due to the size.

2004nvmt.d

```
VMT BY FACILITY
1   0.367000941   0.502699716   0.110056636   0.020242707
    0.367000941   0.502699716   0.110056636   0.020242707
    0.367000941   0.502699716   0.110056636   0.020242707
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.334396888   0.522356872   0.123752733   0.019493507
    0.334396888   0.522356872   0.123752733   0.019493507
    0.334396888   0.522356872   0.123752733   0.019493507
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
2   0.367000941   0.502699716   0.110056636   0.020242707
    0.367000941   0.502699716   0.110056636   0.020242707
    0.367000941   0.502699716   0.110056636   0.020242707
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.334396888   0.522356872   0.123752733   0.019493507
    0.334396888   0.522356872   0.123752733   0.019493507
    0.334396888   0.522356872   0.123752733   0.019493507
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
    0.346313386   0.514333870   0.120290405   0.019062340
3   0.367000941   0.502699716   0.110056636   0.020242707
    0.367000941   0.502699716   0.110056636   0.020242707
    0.367000941   0.502699716   0.110056636   0.020242707
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17	0.719392251	0.227080053	0.034891129	0.018636567
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	0.680561473	0.266915828	0.032148153	0.020374546
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18	0.719392251	0.227080053	0.034891129	0.018636567
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19	0.719392251	0.227080053	0.034891129	0.018636567
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20	0.719392251	0.227080053	0.034891129	0.018636567
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	0.713063621	0.232791203	0.035306649	0.018838527
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21	0.719392251	0.227080053	0.034891129	0.018636567
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22	0.719392251	0.227080053	0.034891129	0.018636567
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	0.719392251	0.227080053	0.034891129	0.018636567
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23	0.719392251	0.227080053	0.034891129	0.018636567
	0.719392251	0.227080053	0.034891129	0.018636567
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24	0.367000941	0.502699716	0.110056636	0.020242707
	0.367000941	0.502699716	0.110056636	0.020242707
	0.367000941	0.502699716	0.110056636	0.020242707
	0.346313386	0.514333870	0.120290405	0.019062340
	0.346313386	0.514333870	0.120290405	0.019062340
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	0.346313386	0.514333870	0.120290405	0.019062340
	0.346313386	0.514333870	0.120290405	0.019062340
	0.334396888	0.522356872	0.123752733	0.019493507
	0.334396888	0.522356872	0.123752733	0.019493507
	0.334396888	0.522356872	0.123752733	0.019493507
	0.346313386	0.514333870	0.120290405	0.019062340
	0.346313386	0.514333870	0.120290405	0.019062340
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	0.346313386	0.514333870	0.120290405	0.019062340
25	0.719392251	0.227080053	0.034891129	0.018636567
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	0.719392251	0.227080053	0.034891129	0.018636567
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	0.713063621	0.232791203	0.035306649	0.018838527
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26	0.567944842	0.379389406	0.037844255	0.014821497
	0.567944842	0.379389406	0.037844255	0.014821497
	0.567944842	0.379389406	0.037844255	0.014821497
	0.549043914	0.401438740	0.033002887	0.016514459
	0.549043914	0.401438740	0.033002887	0.016514459
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	0.549043914	0.401438740	0.033002887	0.016514459
	0.586361287	0.360333631	0.037724077	0.015581005
	0.586361287	0.360333631	0.037724077	0.015581005
	0.586361287	0.360333631	0.037724077	0.015581005
	0.549043914	0.401438740	0.033002887	0.016514459
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	0.549043914	0.401438740	0.033002887	0.016514459
27	0.719392251	0.227080053	0.034891129	0.018636567
	0.719392251	0.227080053	0.034891129	0.018636567
	0.719392251	0.227080053	0.034891129	0.018636567
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	0.680561473	0.266915828	0.032148153	0.020374546
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	0.680561473	0.266915828	0.032148153	0.020374546
	0.713063621	0.232791203	0.035306649	0.018838527
	0.713063621	0.232791203	0.035306649	0.018838527
	0.713063621	0.232791203	0.035306649	0.018838527
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28	0.504460218	0.395187191	0.080736400	0.019616191
	0.504460218	0.395187191	0.080736400	0.019616191
	0.504460218	0.395187191	0.080736400	0.019616191
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.475006870	0.414832709	0.090910127	0.019250294
	0.475006870	0.414832709	0.090910127	0.019250294
	0.475006870	0.414832709	0.090910127	0.019250294
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580
	0.513981887	0.390221829	0.076075704	0.019720580

3 MOBILE6 Emission Factor Output Files

A box has been placed around the composite emission factors used in calculating the total emissions so that it is easy to find. These numbers are multiplied by the total VMT/day for the daily emissions total for Lake & Porter counties.

3.1 2004

2004m6.txt

```
**************************************************************************
* MOBILE6.2.01 (31-Oct-2002)                                             *
* Input file: 2004M6.IN (file 1, run 1).                                 *
**************************************************************************
  M617 Comment:
               User supplied alternate AC input: Cloud Cover Fraction set to 0.34.
  M616 Comment:
               User has supplied post-1999 sulfur levels.
  M603 Comment:
               User has disabled the calculation of REFUELING emissions.


* Reading Registration Distributions from the following external
* data file: IREGDATA.D

* Reading non-default I/M CUTPOINTS from the following external
* data file: IM2002A.D

* Reading non-default I/M CUTPOINTS from the following external
* data file: IM2002B.D

* # # # # # # # # # # # # # # # # # # # # # # # # #
*
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M615 Comment:
               User supplied VMT mix.

* Reading Hourly Roadway VMT distribution from the following external
* data file: 2004NVMT.D

  Reading User Supplied ROADWAY VMT Factors

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: SVMT04.D
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                     Calendar Year:  2004
                             Month:  July
                          Altitude:  Low
                 Minimum Temperature:  62.5 (F)
                 Maximum Temperature:  83.4 (F)
                   Absolute Humidity:   86. grains/lb
                 Fuel Sulfur Content:  120. ppm

                 Exhaust I/M Program:  Yes
                    Evap I/M Program:  Yes
                         ATP Program:  Yes
                    Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
             GVWR:                 <6000     >6000     (All)
                       ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:   0.3898    0.2912    0.1231              0.0564    0.0005    0.0018    0.1320    0.0052    1.0000
  ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite VOC :      0.946     0.803     0.923     0.839     1.001     0.579     0.585     0.464      1.96     0.845
    Composite NOX :      0.865     1.000     1.350     1.104     4.919     1.488     1.394    14.147      1.22     2.949
  ---------------------------------------------------------------------------------------------------------------------
Exhaust emissions (g/mi):
       VOC   Start:      0.256     0.238     0.315     0.260               0.257     0.193                0.398
       VOC Running:      0.202     0.232     0.312     0.256               0.323     0.392                1.130
  VOC Total Exhaust:     0.459     0.470     0.627     0.517     0.446     0.579     0.585     0.464      1.53     0.488

        NOx Start:      0.170     0.195     0.222     0.203               0.078     0.040                0.375
        NOx Running:    0.695     0.805     1.128     0.901               1.410     1.354                0.850
  NOx Total Exhaust:    0.865     1.000     1.350     1.104     4.919     1.488     1.394    14.147      1.22     2.949
```

Non-Exhaust Emissions (g/mi):										
Hot Soak Loss:	0.166	0.109	0.091	0.103	0.178	0.000	0.000	0.000	0.081	0.118
Diurnal Loss:	0.022	0.015	0.015	0.015	0.039	0.000	0.000	0.000	0.005	0.017
Resting Loss:	0.119	0.078	0.078	0.078	0.200	0.000	0.000	0.000	0.350	0.092
Running Loss:	0.173	0.121	0.102	0.116	0.128	0.000	0.000	0.000	0.000	0.123
Crankcase Loss:	0.008	0.010	0.010	0.010	0.010	0.000	0.000	0.000	0.000	0.008
Refueling Loss:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Non-Exhaust:	0.487	0.333	0.296	0.329	0.555	0.000	0.000	0.000	0.437	0.357